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CENTRAL BANKING
in the
BRITISH DOMINIONS

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in the

BRITISH DOMINIONS

by

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To A. M. P.

PREFACE

A FRIEND of mine, whom I asked to comment upon a section of this book, was so judicious as to hand the manuscript to his wife. She said that it read well enough, but lacked human interest. She was right; more right, perhaps, than she knew. An impersonal chronicle of legislative acts and financial activities gives a sorrowfully inadequate picture of any group of financial institutions; but this is especially the case with the Dominion central banks. They are so young, and their circumstances have been so changeable and uncertain, that they have formed few habits and developed few traditions. Little is normal, almost everything is novel. So much has depended upon the attitudes and activities of the persons within and surrounding the new banks that it might have been preferable, had it been permissible, to write this book as a series of biographical sketches.

One recalls a central banker, with finely chiselled features silhouetted against the grey drizzle outside, speaking somewhat sadly of his endeavours to dissuade inexperienced politicians from dangerous policies; and one wonders how hateful he finds it to be brought up in the lift each morning by a slovenly female knitting a green garment instead of surrounded by the deferential attendants who, at home, had served him. Can he be happy? How does his state of mind affect him and those about him? . . . Again, one recalls a commercial banker, a big, bland, dominant, self-confident man, dis coursing with academic familiarity and perhaps more than academic certainty upon economic matters; and railing against a government for their folly in introducing certain legislation—legislation which, so informed gossip had it, would never have taken its existing shape had this man been able to suffer fools gladly. . . . Again, one recalls a prime minister, with something of the jolly bully about him, twitting his guests at a dinner party; of course as commercial bankers they were opposed to a central bank, and nobody could be quite sure what the experts were about to recommend, not absolutely certain! . . . But, alas, the incidents cannot be fully recorded, the names cannot be written in.

This book is a study of the beginning of things; an essay in genetics. The original intention was otherwise, being to study chiefly the policies and achievements of the central banks after they had been established. But this turned out to be possible only to a limited extent; for the lives of the banks had been too short and too disturbed, and much of what little they had done was unrecorded in reports and statistics, left half shrouded in fogs like those enveloping Threadneedle Street. So it came about, partly perforce, that the emphasis of the work was changed; and probably the change has been for the better.

As it has emerged the book differs from others which have been written on the subject of central banking and which are largely concerned with describing constitutions and operations. It differs partly in its introduction of theoretical material at certain points; material which, while following familiar lines, may have some novelty in regard to the behaviour of exchange rates and the processes of business movements in the Dominions. But the chief difference lies in the emphasis which this book lays on the heredity and environment of the banks. An institutional and historical study of their environment, the local capital markets, suggests that the establishment of the banks marked a milestone in the growing independence of the Dominions, in their emergence from colonial to Dominion status in matters of finance. A study of the heredity of the central banks emphasizes the importance of imperialist forces, working chiefly from London, and of nationalist forces working within the countries. It also emphasizes the political nature of central banking, placing it among the modern methods of state control. Thus the search for material led not only to financial but to political sources.

This introduces the matter of acknowledgments. The list of those who have taken an interest and rendered assistance in the preparation of this volume is far too long to be reproduced here. Instead let me simply name the institutions with which most of them were associated, trusting that my helpers will accept my appreciation as none the less sincere because it is not offered to each by name. First must be thanked many people associated with the Dominion central banks and the Bank of England. Debts of gratitude are also due to members of Parliament, treasury officials, and statistical experts in Ottawa, Canberra, and Wellington. As for

commercial banks, help has been forthcoming from the Bank of New South Wales, the National Bank of Australasia, the Bank of New Zealand, the Bank of Nova Scotia, the Bank of Montreal, the Royal Bank of Canada, Barclay's Bank (D.C. and O.), and the Midland Bank. People associated with stock exchanges and security houses in Toronto, Melbourne, and Wellington have given advice and information. Not least are the obligations in academic circles: to the University of Sydney and Auckland University College, to the Universities of Pretoria and the Witwatersrand, to the London School of Economics, to Tufts College and the University of Michigan, to the Universities of Cambridge and Melbourne, both of which hospitably invited me to lecture on Dominion central banking, and lastly to my Canadian friends in Queen's University and my colleagues in the University of Toronto. Since they all go unnamed it is possible to say, without fear of bringing them reproach, that they are jointly responsible for almost everything in this book.

On two occasions the President of the University of Toronto gave special leave which allowed visits to England (1936) and the Antipodes (1938). It would not have been possible to take advantage of this leave had not Mr. Vincent Bladen and Mr. Frank Coe been willing to shoulder some of my work; especially the unenviable task of correcting examination papers.

My greatest debt is to the Bank of New South Wales. They sent Miss Beryl Rouch of their Economic Department to work on central banking problems in Cambridge for the year 1935-6. She has assisted not only by reading and criticizing the manuscript, but also in more menial tasks such as typing it; and she has moreover succeeded in creating domestic conditions which facilitated completion of the work—a feat which my sceptical friends had assured me was impossible in the first fifteen months of matrimony.

And that must bring to a close the human interest of this volume.
Now for sterner stuff!

A. F. W. P.

The University of Toronto,
August, 1939.

POSTSCRIPT

In the fever of war the reader may be tempted to toss this book aside: "C'est (peut-être) magnifique, mais ce n'est pas la guerre!" But this would be hasty. It must be admitted that war has rendered a number of things in these pages obsolete; notably frequent references to "the War," by which is intended the Great War which broke out in 1914. It must be admitted, further, that recent hostilities have been accompanied by a sudden extension of government controls which, being in a state of formation and flux, cannot now be brought within the scope of this work. Nowhere is the extension more striking than here in Canada where, under the edicts of an Exchange Control Board, the capital market has suddenly been severed and insulated from New York and London. In a sense this is a not unnatural outcome of a trend towards financial independence which is traced throughout this book; but how drastic a change it involves, coming unexpectedly, may be appreciated by reading Chapter IV, sections (1) and (2).

And yet this book is in some ways more timely, of greater interest and significance, than it was a month ago. It shows what the last War did for the Dominions' financial systems, indeed it shows how intimately the rise of central banking was associated with wartime emergencies and their aftermath; it shows the nature and the temper and the trend of state intervention in finance over a period of twenty years; it shows how far orthodox monetary controls have been effective, how far unorthodox innovations have been introduced, and how far all these have been successful. Moreover, it may serve in the future by explaining and interpreting the nature of monetary affairs in the Dominions just before the Greater War which broke out in 1939. In short it portrays both the foreground and the background of the Dominions' financial systems, a wide understanding of which is essential if the sinews of war are to be kept supple.

A. F. W. P.

September, 1939.

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INTRODUCTION

INTRODUCTION

(1) SCOPE OF THE WORK

CANADA, Australia, New Zealand, and South Africa have two attributes which, taken together, distinguish them from all other countries: they are fairly new countries and they are British Dominions. Economically their outstanding feature is still the relative abundance of their resources in relation to their population and supplies of capital: but all four have attained a measure of economic diversity and maturity. Politically, they exhibit the emergence of self-government under institutions modelled upon those of Great Britain and erected within the loose and conveniently ambiguous constitution of the British Empire. Culturally, too, they are predominantly British; although special reservations must be made in the cases of Canada and South Africa. It is with these countries, and particularly with their central banking systems, that this book is concerned. Legislation to establish a central bank was adopted in South Africa in 1920, in Australia in 1924, in New Zealand in 1933, and in Canada in the next year.

There are other countries which have, have had, have been promised, or have rejected the status of British Dominion. These include Eire, India, Newfoundland, and Southern Rhodesia. None of them is brought within the scope of this book. The two latter are in a relatively immature state of economic development and neither has acquired a central bank. Incidentally, the financial system of Newfoundland has for many years been dominated by two of the Canadian banks. Indirectly, therefore, the country has been affected by the introduction of central banking into Canada.¹ A Reserve Bank was established in India in 1935, and in Eire a Commission on Banking, Currency and Credit recommended in 1938 that an existing Currency Commission be transformed into a modified sort of central

¹For a survey of the political, economic, and monetary position of Newfoundland, see "Newfoundland, Economic and Political" by A. F. W. Plumptre, A. M. Fraser, and H. A. Innis (*Canadian Journal of Economics and Political Science*, vol. III, Feb., 1937).

bank;³ but neither country is in the present sense a fairly new one. They would not conform to the more or less uniform treatment that can be given to the four Dominions here under consideration.

One more omission must be noted. No attempt is made to describe the internal organization of the Dominion central banks. It would have been of interest, and of some relevance to certain parts of this book, if the duties of each department and each chief official could have been explained, and comparisons made between the four banks. However, the book is sufficiently long as it stands; so this topic must await another time and place.

(2) DEVELOPMENT OF THE DOMINION CAPITAL MARKETS

The success of central banking depends largely upon the condition of the capital market in which it is practised. The better developed the market the more effective will be the normal machinery of central banking. Throughout this book, therefore, constant reference will be made to the state of the capital markets in the several Dominions.

Nature of Development. A capital market is considered to be well developed when it has the following characteristics: (1) rates of exchange and rates of interest (including, of course, security prices) are settled competitively rather than by agreement or custom; (2) there are breadth and liquidity sufficient to satisfy the normal needs of most individuals or institutions operating in the market; (3) there is usually an export rather than an import of capital, and the institutions in the market receive short term funds from abroad and employ them locally rather than depending upon some foreign market as the repository of their own liquid resources.

In a well-developed market, rates of exchange and rates of interest (including security prices) are for the most part settled by direct competition. In such a market there will be a sensitive rate structure. Exchange rates and interest rates of all sorts may be expected to move in concert. A movement of the yield on one type of asset should induce competing banks and financial houses to rearrange their portfolios of securities and induce other changes in prices and yields. An undeveloped market is one in which relatively few rates are competitively determined; and where personal, semi-secret deal-

³*Report of the Commission of Enquiry into Banking, Currency and Credit, 1938, P. no. 2628 (Stationery Office, Dublin).*

ings between bankers and their customers predominate over transactions in long or short term marketable securities. It is one in which many rates are dominated by custom or by agreement between a few financial houses, and where the movement of one rate will have little or laggard influence upon others.

We may distinguish between three ways in which rates may be determined. "Market rates" are those which are determined by fairly free competition, and are generally characteristic of a well-developed capital market. "Published rates" are those which are published or made known by one or more institutions and which are generally available to all clients. "Customer rates" are more or less secret and are subject to individual bargaining and agreement between the parties concerned. To employ the terms of economic theory, which must not, however, be pressed too far in this regard, market rates are determined by perfect competition, customer rates by discriminating monopolists, and published rates by single-price monopolists or associations in restraint of price-war.

The competitive determination of rates and prices may be facilitated by stock exchanges and other centres of organized dealing. Such centres ensure that rates shall not be secret; and that the same facilities and prices shall be available to all. But it is quite possible for competition to determine rates and prices apart from organized exchanges. Direct dealings between large buyers and sellers (e.g., "over-the-counter" purchases and sales of securities), the use of special brokerage houses as intermediaries, and, in conjunction with these methods, the use of rapid communication by telephone, telegraph, and teletype, may suffice to produce a very high degree of competition. Indeed there seems to be a tendency in more than one capital market for over-the-counter dealings to supplant dealings through organized exchanges.³

³"By-passing the Stock Exchange" (*Economist*, London, Feb. 12, 1938, pp. 346-7). It is claimed that this is the result of the *increasing* competition in the gilt-edged market, especially between the larger banks which can afford to employ specialists to look after their security portfolios. In recent years in the United States the activity of bond markets has increased considerably in comparison with stock markets; and the great majority of all bond transactions is done on an over-the-counter basis between financial institutions. See *Report on the Feasibility and Advisability of the Complete Segregation of the Functions of Dealer and Broker* (The Securities Exchange Commission, Washington, 1936), part II; also Melchior Palyi, *The Chicago Credit Market* (Social Science Studies, no. XXXIII, University of Chicago Press, 1937), chaps. III and IV.

Nature of Liquidity. Associated with the competitive quality of a market will be its breadth and its liquidity. These are matters which have recently received increasing attention from economic writers⁴ and which must be of special concern in a study of the potentialities of central banking in the Dominions. A broad market is one in which there are continual operations in a wide variety of loans, securities, and foreign currencies, and in which the institutions dealing in them can individually find the degree of liquidity (marketability of assets) which their operations require. Variety of business will mean that no section of the market is cut off from the rest; that there are many alternative opportunities of differing attraction to different investors, so that a variation in one price will immediately produce repercussions in nearby sections of the market.

The term liquidity is one that is used in several senses from which two emerge paramount: the quality of self-liquidation and the quality of marketability. There seems to be a tendency nowadays to stress marketability; to say that a financial institution is in a liquid position just in so far as it owns cash or is able to dispose of its other assets for cash without such loss or delay as it and other institutions would regard as unreasonable. The ability to "liquidate" in this sense requires that there should be active dealings in such assets as the institution holds and thus a ready market for them: in other words, that these assets must be in the form of marketable securities or call loans—securities that really are marketable and loans that really are callable and not only so named by courtesy. Of course any asset is, theoretically at least, marketable at *some* price and after *some* period of time so that marketability comes to depend upon the reliability of current prices: upon the spreads between bids and offers and upon the volatility of the prices at which deals take

⁴See *Report on the Feasibility and Advisability of the Complete Segregation of the Functions of Dealer and Broker*, part III, chap. III; also A. T. K. Grant, *A Study of the Capital Market in Post-War Britain* (London, 1937), pp. 29, 130-1, 184-6, and 247; also Palyi, *The Chicago Credit Market*, *passim*; and by the same author, *Liquidity* (Minnesota Bankers' Association, Minneapolis, 1936); also Winthrop W. Aldrich, *The Stock Market from the Point of View of a Commercial Banker* (The Chase National Bank, New York, 1937); also John T. Flynn in *The New Republic*, Nov. 3, 1937; also J. M. Keynes's treatment of the concept of Liquidity Preference throughout *The General Theory of Employment, Interest and Money* (London, 1936); and above all A. A. Berle, Jr. and V. J. Pederson, *Liquid Claims and National Wealth* (New York, 1934).

place. Wide spreads are associated with inactive or ignorant trading. Volatility of prices is largely the result of uncertainty regarding the future yields of assets; and prices move, not only in relation to changed views about the future, but in relation to what people think that other people will think in a short space of time.¹ The more unstable and the less diversified a country's economic foundations the more mercurial are likely to be the people's reactions to good and bad prognostications, and the more unsteady will be prices of securities and real estate. Such unreliability is characteristic of young countries and militates against the liquidity of their capital markets.

The second aspect of liquidity is that of self-liquidation. Amongst bankers of the British tradition and in their text-books there is continual stress upon the necessity of making few but self-liquidating loans: i.e., credits which are to finance the transport or processing of raw materials and which will soon be automatically liquidated from the proceeds of the sale of the goods. In the nineteenth-century theories of banking, money, and credit based upon this concept of liquidity were widespread; and since the War such theories have received sanction in high places. Nevertheless, emphasis upon this aspect of liquidity has been diminishing. The development of broad and sensitive security markets has gone far to make banks and other institutions depend for securing ready money in emergency, not upon the maturing (self-liquidation) of their loans, but upon the sale of their marketable assets.

Emphasis upon marketability rather than self-liquidation is evidence of the growth of finance independently of productive processes. Marketability is, obviously, a financial concept: whereas self-liquidation is a concept associated with the flow of goods through the processes of production. The dissociation between self-liquidation and financial considerations is easily exaggerated. The fact that goods are produced or moved from one point to another is no guarantee that they can be sold at profitable prices or that the loans associated with them can be liquidated; and the fact that merchants' and manufacturers' inventories of liquid assets change in *value* may be merely a reflection of an inflationary or deflationary movement in the *prices* of standard commodities. Thus the value of a country's self-liquidating assets may be a thoroughly undesirable criterion for the general extension or restriction of bank

credit. But for all that, the old-fashioned concept of liquidity (*self-liquidation*) has served, and is probably still serving, a useful purpose in keeping financial institutions from degenerating into purely speculative organs, which the marketability principle really invites them to become. It encourages a fairly close relationship between credit policies and productive developments which, whatever its undesirable effects may be in aggravating cyclical credit fluctuations, probably keeps financial operations within the realm of reason.

Moreover, there is this fundamental difference between the two forms of liquidity. A financial community which relied upon the old form relied, in emergency, upon withdrawing money from the stream of the community's incomes, or failing to replace into the stream such money as it was currently receiving. Thus, when one institution began to build up a more liquid position, it was not, directly at least, to the detriment of other financial institutions; for the current prices of marketable assets were left unchanged. But when a financial community comes to rely chiefly upon marketability as a form of liquidity, then liquidation—the sale of assets—withdraws funds from an unreplenished pool instead of a stream. In these circumstances it is only too true that one person's liquidity is another person's illiquidity *within* the community itself. Attempts to liquidate may produce such declines in the prices of assets as will cause the movement to be cumulative. It is difficult to avoid the conclusion that the new situation, apart at least from wise and adept central banking intervention, is very much less stable than the old; and, although, under the old system, whatever ready cash the financial community gained through liquidation was lost by the rest of the community out of its incomes, nevertheless the new state is probably more precarious than the old because of the very widespread destruction of values which follows upon liquidation in a modern capital market. Incidentally, a banking structure which is in a self-liquidating condition must enhance the ultimate effectiveness of accepted central banking operations because the influence of those operations upon the credit policy of the banks will be transmitted quickly and smoothly into the income stream. If marketability is the dominant type of liquidity, central banking operations may indeed affect prices and interest rates and the pool of liquid cash available to the financial system, but they may leave the income stream largely unaltered.

However, there is no use in bemoaning the passing of old-style

liquidity; for it was an accompaniment of a mercantile rather than a manufacturing system, of little business rather than big business. The only way in which to keep finance self-liquidating would be in some way to ensure a regular predictable flow of incomes, or else to use a minimum of fixed, durable equipment. Marketable securities, associated with equipment, have ushered in the new-style liquidity.

Dominion Capital Markets before the War. By the end of the nineteenth century none of the Dominions had developed a capital market of any appreciable breadth; there was little variety of securities, the instability of the extractive industries made self-liquidation uncertain, and there was, except in booms, little marketability of assets. The marketable security is essentially the product of industrialism, urban concentration, and strong, independent government. Industrialism is accompanied by the issue of large blocks of standardized securities, the credit-rating of which may be generally estimated; urban concentration provides the labour supply for industrialism and the market for both the products and the securities of industry; and a strong government provides both the stable legal framework within which it is profitable for private enterprise to amass capital and also the highest grades of gilt-edged issues which form the basis of most investment portfolios.

Before the turn of the century, indeed until the Great War, the Dominions were economically still playing the roles of colonies to Great Britain and in lesser degree to the United States and industrial Europe. Industrialism was only in its infancy, growing up in close relationship to the needs of primary industries and transport or carefully propagated by national policy; and even so, much of its capital came from private sources and from reinvestment without recourse to financial institutions or the capital market. Urban concentration was setting in, but the greater part of the population still depended upon extractive industries and was rural in background and outlook. Mining and lumbering companies might, in some degree and at certain stages of development, obtain funds by the issue of marketable securities: but this was obviously quite impossible for families engaged in agricultural or pastoral pursuits. Strong government, more or less independent of Great Britain, gradually emerged, but until the War there were relatively few security issues floated locally; indeed the procuring of loans *from abroad* was one of the objectives of the formation of centralized governments. Thus

the Dominion capital markets were in an undeveloped state at the outbreak of the War.

It is possible that the development of these markets *qua* markets was actually retarded by the emergence and dominance of a few powerful financial institutions. These may be classified as the loan companies, the insurance companies, and, strongest of all, the commercial banks. The loan companies were primarily engaged in financing land development, rural and urban; and although they did collect some funds, both at home and in London, by the issue of marketable debentures, their business was not such as to promote widespread holding, let alone trading, of securities. The insurance companies grew up at a rather later date for the most part, supplementing the finance of land development; but their funds were largely collected, not by the issue of securities, but through premiums on non-marketable liabilities—*i.e.*, insurance policies. They added little to the market *qua* market. But it was the commercial banks which, from the beginning, seem to have skimmed the cream of the lending business. They were primarily adapted to the provision of commercial, rather than industrial or agricultural credit; and much of their business has always been in the provision of foreign exchange and credit to finance exports and imports. This credit was self-liquidating and thus eminently satisfactory to the banks. It was in association with it that they provided the Dominions-to-be with a uniform and elastic note issue, and later with a monetary system in the form of transferable bank deposits. But the banks, still lending nominally on more or less short term, did extend other credits to agriculture and to the industries and other financial institutions growing up around them. They gained influence by their vigorous extension of branches into all parts of the countries; and they gained strength from successive amalgamations which have left half a dozen or even less in possession of the greater part of the business in each Dominion. Sometimes they got too deeply involved in financing agriculture, or some branch of industry, and burned their fingers; but for the most part their relatively conservative policies and their diversified business, combined with their ability to provide money to their clients in most emergencies, their powers to bring pressure upon them by calling loans at short notice, and their facility in getting preferred legal positions in case of a collapse, placed them, as a group, in undisputed financial

supremacy in each of the Dominions. The concentration of financial business in a few strong hands, rather than in a large group of relatively weak institutions, while it may have given stability and continuity to the economic development of the Dominions, must have resulted in a lack of open, competitive business and an emphasis upon personal banker-customer relationships; upon "customer rates" and "published rates" at the expense of "market rates" in the capital markets.

A further factor militating against the development of local capital markets has been the ability of the financial institutions, and not least the banks, to rely upon London (or, in the case of Canadian institutions, upon New York), as a repository of second-line reserves in the form of call loans and marketable securities. Securities held locally were bought for their yield rather than for their marketability, or because of government pressure. If the banks and other institutions had found it less convenient to carry liquid assets abroad, the amount of local trading, and the degree of local competition, might well have been increased. This is not to say that in the actual circumstances it would have been in the best interest of the banks or their customers if they had depended for liquidity upon the essentially illiquid local market.

The tendency to concentrate dealings in marketable securities in London has no doubt been accentuated by the fact that several of the more important banks operating in the Dominions have been largely owned and directed in London.⁶ These banks are intertwined, and through their directorates interlocked, with a large and powerful section of London finance. It is almost inevitable that the directorates should have taken an imperialist attitude towards the erstwhile colonies, indeed it is clear that some of the leaders still do so; and such an attitude could hardly be conducive to the financial autonomy of the Dominions or to the independent development of their capital markets.

Recent Development. Despite such hindrances as these there has been considerable development in all the capital markets since the War; and for this rapid growth the War itself was largely responsible. The high pressure loan campaigns that had to be conducted in order to meet the financial exigencies of war at one and the same time developed marketing machinery, provided the gilt-edged basis

⁶A. S. J. Baster, *The Imperial Banks* (London, 1929), chap. vi.

for local investment portfolios, and greatly enlarged the number of investors who would buy marketable securities. Thus, just at the time when the rural areas of the Dominions were fairly well filled up and the primary needs for agricultural and pastoral finance were satisfied, war finance focussed the attention of investment intermediaries and well-to-do individuals upon the security markets. Of course it is possible to exaggerate the extent of the change. Johannesburg, Melbourne, Montreal—these and other cities had their stock exchanges before the War; exchanges which were, at times, scenes of very considerable activity. But business was prone to be erratic in volume and price; and a fairly active market in common stocks alone does not constitute what we have called a well-developed capital market. Moreover, the oscillations of common stocks are not easily controlled by central banking operations. It was the change of the Dominion Governments, from borrowing primarily abroad to borrowing primarily at home, which provided the local markets with the stock in trade required by a central bank.

Private enterprise followed the Governments into the local capital markets. Security issues in some cases provided new capital, but in many others simply converted into liquid (marketable) form claims upon industrial assets accumulated through past profits and family frugality, and in still other cases served to liberate industries from their dependence upon the banks; but in all cases, the security issues added new material and new experience to the developing capital markets.

As an accompaniment of internal development came increasing external independence. The War and its aftermath, which hastened the maturity of the Dominions' capital markets, also hastened the maturity of their economic systems. Production became more varied and industrialism grew apace. The stream of funds locally available for investment increased. At the same time the incentive and the ability of London to lend was diminishing; the most fertile of the Dominions' natural resources had for the most part been exploited and the British balance of international payments was such as to impede foreign lending. Canadians turned to New York for loans in the nineteen-twenties, and in much lesser degree the Australians did likewise. While some Canadians were still borrowing, others were beginning to lend abroad; and for two or three years in the nineteen-twenties Canada became a net exporter of

capital, over and above service on her own foreign debt. Again, in the middle nineteen-thirties, Canada attained a position in which to retire much foreign indebtedness and buy up foreign securities. ~~As the same time Australia and New Zealand had no foreign debts left, and, about much foreign borrowing, built up surpluses.~~ reserves in London. In South Africa the currency, which was devaluating gold, took a favourable turn, and this combined with some private import of capital permitted the Government to redeem debt in London on a wholesale scale. Thus by the middle of the nineteen-thirties the Dominions were far from being, on balance, heavy importers of capital.

At the end of the War, and again in the early nineteen-thirties, a new occurrence evidenced and emphasized the growing independence of the Dominions' capital markets. This was the instability of their foreign exchange rates. In the case of the three Dominions in the southern hemisphere the instability was transitory; but in the case of Canada there has been no official stabilization of the foreign exchange since 1931. Accordingly the Canadian banks now keep a more or less balanced international position instead of maintaining a large volume of secondary reserves in the form of call loans in New York. The South African banks have also moved towards a balanced international position.

Lastly, the independence of the local capital markets has been fostered by Governments. The Dominion central banks themselves are symbols at once of the decline of financial colonialism and of the arrival of financial Dominion status. In some ways the emergence of the chain of Empire central banks has changed the form rather than the substance of imperial financial relationships; but in others the new banks support the independence already achieved and foster its growth. As lenders of last resort, they supply the local capital markets with a type of liquidity, of marketability, hitherto unknown. The arrival of central banking ends, once and for all, the undisputed pre-eminence of the great commercial banks. Shorn of the note issue, of ultimate responsibility regarding credit policies, and of direct influence upon the counsels of the Dominion Governments, forced to give up their gold reserves to the custody of the newcomers, and decreasingly able to maintain their international and imperial relations, the Samsons of old are increasingly subject to Philistine influences.

(3) THE NATURE OF CENTRAL BANKING

Accepted Central Banking. In most of its branches central banking is a relatively new art, and like many modern methods of state control it is in process of development and extension. What was considered to be good central banking practice some years ago may today be regarded as out of date and inadequate. Ideas regarding the proper functions of central banks differ not only from time to time, but from place to place and from person to person.

Despite this diversity a considerable measure of agreement has emerged, throughout the English-speaking world at any rate. (Our emphasis here will be, for obvious reasons, upon British rather than American thought, but there is relatively little divergence between the two.) Indicative of the agreement is the similarity of treatment accorded to central banking in such authoritative works as those of Kisch and Elkin, the Macmillan Committee, and, most recently, the Deputy Governor of the South African Reserve Bank.⁶ In this regard the latter author writes as follows:

While their constitution and range of statutory powers differ to no small extent, all the so-called central banks show a tendency in practice to conform to or work up to, an almost uniform pattern in respect of their functions and methods. . . . Central banking has become an entirely separate branch of banking, as compared with commercial banking, investment banking, industrial banking, and agricultural banking. It has developed its own code of rules and practices, and the existence of a science of central banking has been acknowledged by many. A clearly defined concept has been evolved. . . .⁷

To describe this concept we shall employ the term "accepted central banking."

Accepted central banking thought, which was largely embodied in the original constitutions of the central banks in the four Dominions, has concerned matters of policy, structure, and operations. In the ten years which followed the War, when the chief monetary danger seemed to be violent currency inflation, accepted policy was naturally the establishment and maintenance of the gold standard. In later years it has become part of a central bank's accepted duties

⁶See Sir C. H. Kisch and W. A. Elkin, *Central Banks* (London, 1928), with a foreword by Montagu Norman, Governor of the Bank of England; also the *Report of the Committee on Finance and Industry* (H. M. Stationery Office, 1931, cmd. 3897); also M. H. de Kock, *Central Banking* (London, 1939), with a foreword by Johannes Postmus, Governor of the South African Reserve Bank.

⁷de Kock, *Central Banking*, pp. 14-15.

to study and, as far as lies within its powers, to remedy cyclical movements of economic conditions.

Accepted central banking structure has had political as well as financial aspects. Politically, it has been considered essential that a central bank should be kept free from "political interference"; a danger which might be minimized by having the board of directors selected in some way other than appointment by the Government. Financially, the accepted principles have been as follows: (1) a central bank should have the sole right of note issue, or practically the sole right; (2) the note and deposit liabilities of the central bank should not exceed some specified relation to its reserve of gold or foreign exchange or both; (3) a central bank should deal chiefly with the Government, as banker and adviser, and with other banks and financial institutions, as a "bankers' bank"; it should not generally compete with other financial institutions in the business they conduct with the public; (4) a central bank should be limited by law or discretion in lending to the Government; (5) the commercial banks, according to law or custom, should keep most of their reserves in the form of deposits in the central bank and should use these deposits for the settlement of clearing-house balances between themselves; in this way the central bank should become the repository of the country's reserves of gold and foreign exchange, of which, in its central position, it could make most economical and effective use; (6) in order to be of service to its clients in emergencies, as a "lender of last resort," a central bank should be, above all other banks, liquid; and for this purpose it should hold a large proportion of gold or foreign exchange and invest the remainder of its funds in short term and if possible self-liquidating securities; (7) a central bank should pursue its policy by the exercise of accepted operations.

Before turning to a consideration of what is meant by this seventh point a warning should be given. The reader must not jump to the conclusion that the first six financial canons necessarily contribute in any way to the success of accepted operations. These canons are largely the product of the evolution of the Bank of England. Some of them are valuable, the proved organisms of the past adapted to a modern environment; but others may better be regarded as vestigial, redundant at the best and at the worst impediments to normal, healthy performance. A central bank does not, in fact, have to have all these accepted attributes in order to conduct

accepted operations successfully. Criticism of these attributes will be postponed until section (4) of this Introduction.

Accepted central banking operations are three in number: movements of the bank rate, operations in the open security markets, and operations in the foreign exchange markets; and in addition to these three the bank may employ personal influence and advice. It is convenient to distinguish between those operations the effects of which are primarily internal (intra-national) and those of which the effects are primarily external (international); but this device is purely expository, for in practice internal and external influences blend and interact.

Internal Operations. The most time-honoured of all central banking operations is movement of the bank rate. This may be roughly defined as the rate at which the central bank will make loans to (or discount bills for) the ordinary commercial banks or other financial institutions. The amount of lending of this sort which central banks usually do is not very large. Its importance arises from the fact that the commercial banks know that they *can* borrow money in emergency at a price, i.e. at the bank rate. The emergency may be a time of financial panic, the culmination of a speculative boom, or a seasonal peak of business. Normally, however, it is considered good practice for the central bank to supply the country in general and the capital market in particular with what is considered to be an adequate amount of money, and to keep the bank rate at such a height that any bank which "over-lends," finding itself short of funds and forced to borrow from the central institution, will have to pay a slight penalty. For this reason a central bank is well called "the lender of last resort."

It may be gathered from this description that movements of bank rate, since they usually affect only a very small margin of loans, are unlikely to exercise much effect upon the whole complex mass of interest rates in a capital market. This inference, while not entirely incorrect, is subject to modification upon two counts. First, the more competitive and the more fully developed the capital market the more likely is it that a movement in one corner will have wide repercussions. Second, a movement of the published lending rate of the central bank is usually taken, in a competitive market, to be an indication of a movement in rates on the market which the bank either expects or desires. Because the bank is usually considered

to be exceptionally well informed its expectations carry weight, and because it has means of implementing its desires borrowers and lenders have a further reason for adapting the rates at which they do business in harmony with movements of the bank rate. Thus, in a well-developed market, the bank rate exercises a certain amount of influence, and at times a considerable influence, upon the rates at which loans are being transacted; and in London the bank rate has acquired special power because a number of other financial institutions have developed the tradition of moving their deposit rates in harmony with it. Whether the breadth or the traditions of the Dominions' capital markets are such as to lend force to movements of central bank rates is a matter for enquiry in later chapters.

Open market operations are further means at the disposal of a central bank. These operations consist of purchasing or selling securities—government bonds, treasury bills, or commercial bills—in the open market. They exercise a direct effect, just like any other purchases and sales, upon the prices of the securities, and consequently upon their yields (current interest rates); but their indirect effects may be of even greater significance.

The indirect effects of open market operations arise from their influence upon the cash reserves of the commercial banks, and the several-fold response which these banks normally make when their reserves are altered. If a central bank wishes to expand credit and raise security prices (lower interest rates), it buys some securities from, say, a security dealer. This dealer receives payment in the form of a cheque on the central bank and this cheque he deposits in his own commercial bank. The commercial bank then forwards this cheque to the central bank. The central bank credits the commercial bank with a "deposit" equal to the cheque. Deposits at the central bank are considered as a form of cash reserve by commercial banks. Thus, by purchasing securities, the central bank creates cash reserves for the commercial banks; and conversely, by selling securities it draws upon and destroys their reserves.

The response of a commercial banking system is likely to reinforce by several-fold the expansionary or contractive operations of the central institution. This is because no commercial banker can afford to see his cash reserve fall or rise very substantially in relation to his own liabilities to his depositors without taking some offsetting action. If the cash position falls, he runs the danger of being unable

to meet his depositors' demands for cash as they occur; if it rises, it means that the proportion of his assets earning revenues (in contrast to unproductive cash assets) automatically declines and his profits fall away; and in either case he is running the risk of being forced out of business. Thus bankers like to keep a fairly steady relationship, usually about one to ten, between their cash reserves and their deposit liabilities.

Accordingly, when the central bank produces changes in their cash reserves they are likely to change their policy regarding lending, or purchasing securities. If a commercial banker receives reserves (deposited with him by the investment dealer, as described above), he will feel able to dispose of perhaps nine-tenths of this new deposit, keeping about one-tenth as a cash reserve. The nine-tenths will either be paid out for securities purchased or in new loans; and, since money never stays out of the banks long, it will, in a day or two at most, be deposited again in some bank. Then new loans and security purchases (now nine-tenths of nine-tenths of the original amount) can be made; and so on, again and again, in ever diminishing size. Ultimately the process will reach a new equilibrium when the banks, as a group, have increased their assets (cash, loans, and investments) and their liabilities (deposits) roughly in ten-fold proportion to the change in their cash reserves.

It has become general practice amongst economists to consider bank deposits as money. This is because so much buying and selling is nowadays done, in Anglo-Saxon countries at least, by transferring deposits from one person to another, from one bank account to another, by means of cheques. All financial and real estate transactions, all wholesale transactions, many retail transactions, most salaries, and an increasing proportion of wage payments are conducted in this manner. Thus it has become customary to say that, by means of open market operations, a central bank can initiate a change in the amount of money (bank deposits) available to the public; and that the change will be several times, perhaps ten times, larger than the original operations because of the repercussions of lending and depositing that go on between the public and the commercial banks when the reserves of the banks are altered.

In practice, the effectiveness of open market operations depends upon several factors: factors which we shall find of special significance to central banking in the Dominions. First of all, if the

central bank, according to accepted precept, limits its purchases and sales to highly liquid, short term securities, it can only undertake such operations continuously and effectively if the local short term market is well developed. Second, at times, particularly in bad times, the commercial banks may be unable to find satisfactory borrowers, or, if their loans are illiquid, they may not be able to reduce them; and then the repercussions of open market operations depend entirely upon whether the commercial banks can find suitable securities to purchase or whether they can dispose of their existing holdings in the local market. If the market is narrow they may be unable to do this. Third, if the commercial banks have become accustomed to regard as their most important reserves deposits in some well-developed money market abroad, or if for some other reason they allow their local reserves to fluctuate widely before feeling impelled to embark upon policies of expansion or contraction, the objectives of the central bank's operations may be long delayed or altogether frustrated. Thus, in the case of open market operations as in the case of the bank rate, their effectiveness depends in large measure upon being applied in a well-developed capital market.

In addition to its influence over interest rates and the volume of money a central bank has a further measure of control over the volume of borrowing. This arises out of its advisory functions. It is the Government's bank, a source of expert information and disinterested advice. It also manages the issue, servicing, and refunding of the Government's securities. In these roles it may influence the whole fiscal policy of the country, and more particularly policy relating to borrowing for public works. In the case of a well-established, highly respected central bank, the influence of its advice may spread even wider. It has become customary for borrowers who seek to float issues of long term gilt-edged securities in London to seek the approval of the Bank of England. The ability of the Bank to regulate borrowing by giving or withholding consent has been in recent years an important factor facilitating the successful refunding of government issues and the employment of British money and men in approved projects of development.⁸ The

⁸Cf. *Economist* (London, Feb. 8, 1936), p. 292: "The gilt-edged new issue market, since 1932, has been 'controlled' under official auspices." And again on Feb. 27, 1937, pp. 476-7, the statement was made that "the market has been

Bank's power in this regard is partly dependent upon the fact that British borrowers seldom if ever seek loans outside Great Britain. If British borrowers, like those of the Dominions, were accustomed to using the services of financial houses in foreign centres, and if Britain were normally or frequently an importer instead of, or as well as, an exporter of long term capital, the Bank's direct influence over the volume of private long term borrowing might be considerably impaired.

Control over the rates of interest, the volume of money, and the amount of borrowing and lending is not accepted as an end in itself. It may be employed, in ways to be explained below, to promote the maintenance of the gold standard and stability of a country's foreign exchange rate; which stability, in its turn, may facilitate international trade and investment and, by promoting the international specialization of economic activities, may raise standards of living and foster amicable international relations. Alternatively the object of control may be primarily intra-national: the prevention of those speculative excesses which so often seem to turn prosperity into depression and, still more ambitiously, it may be the regulation of the flow of money out of the capital market into the stream of incomes. Borrowing and spending may possibly be encouraged in bad times by a plentiful money supply and low interest rates, and in good times may be held in check by monetary stringency, high interest rates, and rationing. In such ways may some influence be exerted over the general trend of incomes, prices, employment, and prosperity.

External Operations. And now we turn to the external (international) operations which are accepted as falling within the sphere of central banking. Attention must be focussed upon the foreign

protected by the ban on foreign issues and the strict regimentation of borrowing by home corporations." See also A. T. K. Grant, *Study of the Capital Market in Post-War Britain, passim*. The controversy which arose in June, 1935, between the Corporation of Glasgow and the Bank of England regarding the terms of an issue, brought forth an official statement from the Government brokers which read in part as follows: "The extent to which the Bank of England intervenes is that in compliance with the express request of the Chancellor of the Exchequer it considers Corporation or other trustee loan proposals that are submitted to it with a view to agreeing the amount of the proposed loan and the date of its issue, in order to obviate overlapping and congestion" (*Financial News*, London, June 13, 1935).

exchange market. A country's exchange rate is determined by forces which may be classified under the headings of supply and demand. The demand for foreign currencies, and their price, tend to rise when goods are bought and imported from abroad, when loans are made or securities purchased in foreign countries, when tourists travel abroad, and so forth. Conversely, the supply of foreign currencies thrown on the local foreign exchange market depends upon the volume of exporting, the volume of borrowing from abroad, the expenditures of tourists visiting the country, and so forth.

A central bank, within the bounds of accepted practice, may operate upon the foreign exchange rate either directly or indirectly. The bank may buy and sell exchange directly on the market, and thus influence the rate.⁹ The extent to which it can employ this method is limited by the funds at its disposal; that is, it can only go on selling foreign funds, and buying (supporting) the local currency, as long as its supplies of foreign funds hold out or as long as it can secure new supplies of foreign funds by selling its gold reserves or borrowing abroad. The central bank is only one and not necessarily the largest among the many operators buying and selling in the market, so that too much cannot be expected from direct exchange operations. They may be very effective for a short time; but they may be useless in a long pull.

The short run effectiveness of direct operations may be supplemented by bank rate action. If the central bank wishes to raise the value of the local currency, or to maintain it stable in the face of selling pressure, it may either, as we have described, employ its own reserves of foreign currencies and gold, or alternatively it may raise the bank rate. In a well-developed market this normally causes other rates of interest to rise. It now becomes more profitable to employ money in this centre than it was before; any efflux

⁹In paragraph 360 of the *Macmillan Report*, it is stated that direct operations on the foreign exchange market "have played no great part hitherto in the Bank's scheme of control." This situation was, in effect, changed by the establishment of the Exchange Equalization Account in 1932: but exchange equalization accounts, variable requirements for stock exchange margins, variable minimum reserves for commercial banks, etc., are still more or less experimental and are therefore not included amongst accepted means of control. The Report, naturally in its time, considered the buying and selling of gold quite separately from the buying and selling of foreign exchange; but here they are treated together for brevity.

of lending which existed may be diminished, any influx of borrowing may be increased. The check to lending abroad and the stimulus to borrowing from abroad diminish the demand for foreign currencies and increase their supply on the local market; and the value of the local currency is increased or maintained.

To supplement still further these short term influences upon the exchange rate the bank may exercise its advisory influence over the policies of individual financial houses. For instance, the Bank of England has had a good deal to say regarding what foreign security issues might be floated in London. At a time when the Bank wishes to maintain or increase the value of sterling it discourages lending from the London market. A similar influence may be exercised by a central bank in any country that is normally an exporter of capital; it can hardly exist under other circumstances.

Lastly, what are the fundamental forces which a central bank may exert over still longer periods in order to make the exchange rate conform to its policy? These arise out of the ability of the bank to influence the internal situation. The nature of this ability has already been discussed. If a central bank, by its bank rate policy, its open market operations, and its influence over the borrowings of Governments and public or private concerns, can influence the general level of prosperity, of incomes, of employment, of prices, and of purchasing power, then it may influence very fundamentally the demand for, and the supply of, foreign exchange. For instance, rising incomes and employment will probably be associated with increased imports from abroad, an increased exodus of tourists, and increased savings out of which loans may be made to foreign countries; all of these factors constituting new demands for foreign currencies. Thus we see that if the accepted instruments of internal control are effective, the difficulties of maintaining a given policy regarding the exchange rate may be greatly lessened.

Conclusion. So much as an outline of what is meant by accepted central banking. Attention must be called to one point. Throughout the description it was pointed out how one accepted instrument after another depended for its effectiveness upon the existence of a fairly well-developed capital market.¹⁰ Bank rate policy involved

¹⁰"The books which deal with the theory and principles of central banking are devoted almost exclusively to the situation as it exists in Great Britain and the United States, which have international money markets in London and

a competitive market in short term loans; open market operations needed a broad market in long as well as short term securities, direct advisory influence over the volume of domestic long term lending required that borrowers should not normally have recourse to foreign markets; control of the foreign exchange rate depended upon all these things and, further, upon the international movement of balances in response to movements of bank rate and the position of the market as an exporter of capital. In the following four chapters, one of which is devoted to each of the Dominions, and in other chapters later in the book, an attempt will be made to show the extent of the development of each capital market and the degree to which accepted measures of control may be effective.

(4) SOME COMMENTS ON THE STRUCTURE AND OPERATIONS OF CENTRAL BANKS

Political Independence. One of the primary tenets of accepted central banking thought has been the importance of keeping central banks politically independent. The method usually adopted for this purpose has been the election of directors by private shareholders or by the commercial banks, in short by some group other than the Government of the day.

In the English book upon central banks¹¹ which has been a standard work for many years and which gains special authority because Mr. Montagu Norman, the Governor of the Bank of England, was willing to write the Foreword, it is possible to discover five points in favour of independence: (1) The bank's operations must be continuous, and this cannot be assured if it is subject to changing Governments.¹² (2) The Government is the largest borrower in the money market. If it also "administers" the market (i.e., controls rates of interest) instead of leaving the matter to an independent bank, it may have to choose between actions immediately beneficial to itself and ultimately beneficial to the country. "The creation of such dilemmas should be avoided."¹³ (3) "It is essential that its

New York, and practically ignore the position of the great majority of countries which do not have well-organized money markets if at all" (de Kock, *Central Banking*, p. xii).

¹¹Kisch and Elkin, *Central Banks*.

¹²*Ibid.*, pp. 18 and 20.

¹³*Ibid.*, p. 21.

[the central bank's] direction should be as unbiassed as is humanly practicable."¹⁴ (4) Experience shows that there is a danger of inflation if a country's currency policy falls into the hands of politicians.¹⁵ (5) There is something special about monetary policy which makes its administration more dangerous or more important than "a state railway system or a state tobacco monopoly." The speciality of money is not stated, but may be inferred from references to the fact that "the decisions of the Bank react upon every aspect of the economic activities of the country."¹⁶

It is worth while to consider these arguments briefly. The important point to keep in mind is whether each argument really supports the establishment of some special form of independence for a central bank, such as a board elected by private shareholders, or whether it is in essence simply an objection to state intervention in any form.

(1) First of all, it is said that a central bank's operations must be continuous, and this cannot be if it is dependent upon changing Governments. Now this is just the sort of argument that can be used equally well regarding any department of state activity. Under democratic government some sort of balance must be achieved in all departments by means of a stable civil service modifying the drastic changes of policy which successive Governments might otherwise introduce. Thus this argument does not support the establishment of a central bank with *special* independence.

(2) It is said that a Government should be saved from the dilemma of choosing between one policy (e.g., the lowering of interest rates) which would be to its immediate benefit and another which would be more beneficial to the country in the long run. Here again is an argument which can be used against *all* activities of government. In practice it is impossible to avoid dilemmas between present benefits to a dominant group and ultimate benefits to the whole community; they are necessarily associated with government in an uncertain world.

(3) It is said that the direction of a bank should be "as unbiased as is humanly practicable." This, surely, is true of all departments of government. There seems no cause here for the establishment of monetary controls in any specially independent form.

¹⁴Ibid., p. 20.

¹⁵Ibid., p. 27.

¹⁶Ibid., pp. 7 and 20.

Moreover, the attempt to establish an unbiased directorate by means of election by private shareholders or commercial bankers is doubly doomed to failure. In the first place, there is no such thing as an "unbiased" or "scientific" monetary policy. Some policies are beneficial to some groups, others to others (and some, of course, to none); and the members of each group will generally favour those policies which seem to benefit them and will be likely to regard themselves and people of the same opinion as "unbiased." In the second place, the method of shareholder-election, which ordinarily amounts to a system of co-option by the existing directors,¹⁷ is practically certain to result in a board with strong biases in certain directions because it will be composed of a group of men with very similar outlooks. People with fundamentally different opinions will be regarded as unsound, even dangerous, and will never be co-opted. Election by commercial bankers also makes certain the dominance of certain strong biases.

(4) and (5). It is said that there is a danger of inflation if monetary control is entrusted to Governments; and that there is something specially dangerous and important attaching to such control which makes central banking independence imperative. In considering these points it is desirable to distinguish between what happens in such crises as war, revolution, or very severe economic disturbance, and what happens in other, more settled conditions.

In times of crisis it is generally agreed, even by the sponsors of extreme central banking independence, that the state should take command. In extremities, needy Governments have in the past turned to the printing press or to debasement of coinage; and in the future they will turn to the technique of credit creation. In the past

¹⁷This is generally the case nowadays in joint stock companies, and central banks so organized do not usually provide exceptions to the rule. The point was most clearly put by Professor T. E. Gregory when accompanying Sir Otto Niemeyer on a mission for the Bank of England. He said, in part, "the selection by shareholders is largely equivalent to co-option subject to a veto by the electoral body. The case of the Bank of England shows how admirably this system can be made to work. . . ." (paragraph 9 of his Memorandum submitted to the Select Committee of the Australian Senate on the Central Reserve Bank Bill and published with the Committee's Report, Canberra, 1930). In the same paragraph Professor Gregory said concerning a central bank's directorate; "An executive body of lower average intelligence and experience may work better if its members are homogeneous than a more brilliant body of individuals connected by no common point of view."

the results were often catastrophic. But it is surely very superficial to attribute the major monetary cataclysms—the French assignats, the German mark, *et al.*—to political interference in monetary matters. Political action was taken under the stress and in the midst of chaotic conditions; it was these conditions which made orderly finance impossible.

When we consider more normal times opinions will differ as to whether there is a *prima facie* case against the behaviour of politicians. One can find many instances in which the power to issue money has lain in political hands, but has not been abused. For instance, in Canada from the time of Federation (1867) until the establishment of the central bank, the power to issue legal tender money lay with the Dominion Government. But most critics of the situation, so far from blaming the Government for sins of active inflation, have criticized the inactivity of the Government in the face of inflationary and deflationary movements financed by the bankers. On the other hand, against the politicians of various countries must be recorded instances when they have succeeded in keeping interest rates down at times when responsible financial opinion favoured an increase. But even here, one hesitates nowadays to make a forthright condemnation, for continuously cheap money can find support in certain academic and financial circles as well as amongst politicians.

The management of money (under fairly stable political conditions) is no more dangerous and no more pervasive in its effects than a number of other state activities. For instance, it is clear that the regulation and ownership of railways and other utilities, and the adjustment of tariffs, have been the chief tools used by Governments to mould development in the Dominions. Moreover, it is also clear that the temptations for the corruption of politicians and business men (for every one that receives a bribe there must be another who gives it), in the administration of tariffs and natural resources, are infinitely greater than in the field of monetary management—which is practically nobody's special business. Yet it would be difficult to secure support for an independent board (elected by private shareholders, perhaps) with authority to regulate the tariff.

Other arguments have sometimes been advanced in favour of unique monetary machinery. It has been suggested that the unique, three-fold relationships, which a central bank must maintain, con-

stitute good reason why special measures should be taken to ensure its independence. No other agent of control must maintain continuous connections with the treasury, with central banks abroad, and with the financial community at home. If its relationships with any one, and specially with the treasury, are too close, its relationships with the others will be jeopardized. In particular, the commercial banks at home and the central banks abroad will not entrust it with the confidential information necessary for its successful operation if there is danger of this information being used for political purposes.

There seem to be certain objections even to these arguments. The peculiarity of the position of a central bank seems exaggerated. In its foreign contacts a central bank is by no means unique. Departments of external affairs and departments of defence immediately spring to mind. One presumes that these departments in each of the Dominions collaborate fully with each other and with their counterparts in Great Britain. Presumably not all the information received is passed on to the respective ministers and out to the public in political controversy. Some sort of *modus vivendi* is worked out between the permanent civil servant and the transitory minister, depending upon the personalities involved. Certainly it would be intolerable if matters of foreign relations and defence were handed over to independent bodies (perhaps elected by private shareholders), not responsible to the Crown but free to disclose or withhold such information as they saw fit. It is interesting to reflect that if central banks had not emerged as more or less independent financial institutions, which could not be permitted to receive the gains or suffer the losses incidental to large exchange operations in the modern world, it might have been they rather than the treasuries in various countries to which the management of exchange equalization accounts would have been entrusted. The attempt to be an independent financial institution in a world bent on state control has its drawbacks. Moreover, since the Tripartite Agreement of 1936 by which the Treasuries of Great Britain, France, and the United States, and later of other countries, agreed to collaborate in preventing violent exchange movements, it has become patently absurd to suggest that independent central banks are necessary for international monetary co-operation.

Regarding the relationships between a central bank and the local

financial community, it is probable that these will be better, and that the bank will be more influential, if it resembles an ordinary financial institution rather than a government department; if the senior officer is a "general manager" or "governor" rather than a "deputy minister" or "under secretary"; and if the formal relationship with the Government is not too close. At this point, as at others in this book, it is necessary to take account of the attitudes of the financial community; but, as always, the concessions made to those attitudes should be in matters of form rather than in matters of principle. If a central bank can be endowed with a measure of independence, without at the same time leading the general public or (perhaps even more important) the officers of the bank itself to believe that its position is irresponsible, so much the better.

The sensible policy seems to be for a central bank to be run, not as a direct department of government, but under the guidance of directors appointed for fairly long, overlapping terms by the Government and responsible to the Government. Boards of directors of this sort are to be found nowadays in charge of many sectors of national economic life; and a body of administrative law and political convention is growing up around them. In the case of a central bank, as in other cases, it is desirable that those appointed to the board should be representative of, but not representatives for, various sections of the community. This sensible policy Australia followed from the time when the Commonwealth Bank first acquired a board of directors; it was adopted in New Zealand and Canada after experiment with directors elected by private shareholders; only in South Africa do directors elected by private shareholders still remain on the board of the central bank, the last remnant of this phase of accepted central banking in the Dominions.

The board of directors of any central bank is more likely to act as a shock absorber than as a steering gear. The real directive force will come almost invariably either from the Government, the treasury, or else from the chief officers of the bank. Nobody else is likely to be in sufficiently close touch with the course of events. Moreover, most people find central banking so different from ordinary business and financial ventures in its objects and methods that they have considerable difficulty in understanding what it is all about, or what action is reasonable in given circumstances. If the directors come from various sections of the community and from

different walks of life, their presence on the board may reassure the public that all views and interests are being given due consideration; but actually the central bank must usually rely upon much more prompt and well digested information than can generally be obtained from occasional meetings of boards of directors. The case of Australia has not entirely substantiated these generalizations for there some directors have been very influential; but the reason for this exception lies in the fact that the Commonwealth Bank's chief business has been the familiar one of commercial banking. Now that its central banking activities are increasing the influence of the directors is likely to become less.

Misleading Similarity of Central and Commercial Banks. A central bank looks rather like a commercial bank. Each usually has a capital, a reserve fund accumulated from profits, cash reserves, liquid investments, and deposits of various sorts. A casual observer could no doubt detect certain differences in their balance sheets, for instance almost all the liabilities of a central bank are usually payable on demand, while the commercial banks are entitled to require so many days' or months' notice before meeting many of their liabilities. On the other side of the balance, the assets of a central bank appear more liquid, more easily convertible into cash; for the assets of a commercial bank, in addition to marketable securities, include loans to farmers pending the sale of their crops, loans to businesses pending the disposal of stocks of goods, and so forth. The observer is easily led to believe that the chief differences between commercial and central banking lie in such matters.

But the truth is otherwise. The divergence runs deeper. It is so deep that one can scarcely avoid misconception in using the language, the terminology, of commercial banking to describe central banking; and yet it is the only language that has been devised for the purpose. The only protection against misapprehension arising from incongruous language is to grasp the point of view of a central bank; and this involves shedding, for the time, the point of view of a commercial bank, and, indeed, of ordinary business. If one asks why, despite its incongruities, the same language is used for both, the answer must be sought in the past. It is because the leading central banks emerged only recently as a species distinct from commercial banks.

Amongst the remaining pages of this chapter we shall discuss

the relevance to central banking of certain terms which are familiar to commercial banking. The purpose of this discussion is two-fold. It may assist some readers in the difficult task of adopting the point of view of a central bank. It may also throw light, at a later point in this book, upon the quality of the advice upon central banking structure which was offered to the Dominions from abroad.

Liquid Assets. The first term to be discussed is "liquid assets." In the literature of central banking there is frequent reference to the necessity of keeping a central bank in an extremely liquid position. If the bulk of an institution's liabilities are payable on demand, it is said, it is essential that its assets should be highly liquid, easily convertible into cash. Only thus will it be able to meet its obligations as they arise. And this rule is the more cogent if the institution is the repository of the country's cash reserves, and liable to be called upon to supply funds to the private banks in emergency.

Now if the emergency is a sudden demand for *foreign* funds, and the liquidity which is urged is the convertibility of the bank's assets into foreign currencies without loss, then this precept makes sense; but it makes no sense at all if, as seems usual, the emergency which is envisaged is a shortage of funds, a tightness of money, in the *local* market. In such an emergency the ordinary commercial bank, faced with the demands of its creditors, may have to *call* in loans or *sell* securities in order to secure ready cash. But it is just the reverse with a central bank.

The difference of behaviour arises quite naturally out of the difference of function. The commercial bank is primarily an intermediary, borrowing money on the one hand and lending it on the other; and liquidity is the ability to dispose of assets and secure money without loss. The central bank, by contrast, is not primarily an intermediary but a source of legal tender money. Its ability to supply local money is *not* limited by the unreadiness of other firms in the market to repay its loans or to buy up its securities. If it is to be of service in a financial stringency it must *make* loans and *buy* securities, thus providing funds for other institutions. In this it may encounter limitations in its constitution; but it is not restricted, as a commercial bank is, by the "freezing," the illiquidity, of its past loans and investments.

According to accepted precept, all the Dominion central banks

except the Commonwealth Bank of Australia were originally required, not only to keep reserves that would serve to meet a demand for foreign funds, but also to keep the greater part of their remaining assets in the form of highly liquid, early-maturing securities. Can any defence of this legislation be given other than the one which has just been shown to be illogical?

There are two defences which may be put up. One is that if a central bank was allowed to invest in long term securities of fluctuating value it might hold issues which, in a declining market, would fall so heavily as to obliterate its profits, impair its capital, or even cause the institution to become insolvent. The matter of profits and insolvency is considered below. Anticipating the argument, we may say that there is no *financial* reason to be found why a central bank should not disclose periodic losses, and it cannot become insolvent because its liabilities are legal tender money; but it may be necessary for a central bank to conform to conventional standards of profitability in order to retain respect in its immediate financial environment.

We now come to the second argument for a policy, although not necessarily for legislation, designed to keep a central bank liquid. While it is true that a central bank will not usually want to sell its securities or withdraw its loans when money is very tight, occasions will arise when it does want to undertake contraction of credit. Under these circumstances a normal procedure might be to sell government securities in the open market (using the cheques received to wipe out some of the deposits of the commercial banks in the central bank). But in two at least of the Dominions the security market is very narrow and heavy sales might break the market. This would cause losses to the central bank (the whole question of profits is discussed below); and, more serious, the fall of gilt-edged securities might impede government financing and therefore be most unwelcome to the treasury. If the central bank was in a position merely to allow treasury bills or other liquid, short term securities to mature and be repaid, this would serve just the same purpose as selling securities without any positive action being taken by the bank.

This argument for a high degree of liquidity is not frequently to be seen in print, but it seems to be accepted by some central bankers. As far as it goes it is sound. But it must not be pressed too far. The degree to which government financing is facilitated is less than

appears at first sight. A central bank which wishes to contract credit but refrains from selling securities must also refrain from taking up treasury bills. The market for treasury bills loses support. Whether this is favourable or unfavourable to government finance will depend upon the Government's dislike for difficulty in the issue of treasury bills as opposed to a fall in the prices of long term securities. In Australia, (and wherever treasury bills are assigned at fixed prices to the commercial banks), no rise in the bill rate would occur when the Commonwealth Bank withdrew support: but the Bank would be faced by the alternative either of assigning the bills which it refused to buy to the commercial banks where they would be regarded as practically equivalent to cash, thus offsetting the effort to contract, or else of reducing the total issue of treasury bills, which can hardly be considered favourable to government finance.

Moreover, this argument for liquidity is not necessarily an argument for legislation on the matter. There is a strong case in favour of choosing sensible central bankers, and allowing them to use their discretion under whatever circumstances confront them; and this weighs against constitutional restrictions upon the nature and currency of the securities to be bought by a central bank.

Reserves of Gold and Foreign Assets. The same quandary—how far to trust your central bankers to be wise and how far to legislate against their folly—occurs in regard to all constitutional matters. It has probably been most hotly argued in relation to central banks' reserves of gold and other assets acceptable as payment in foreign financial centres. Although much has been said on this topic none of it is conclusive; nor, in the nature of the case, can it be.

If it could be granted—and many people would not go this far—that it was desirable to restrain central bankers from depleting the nation's reserves of gold and foreign assets below a certain minimum, except in urgent situations and with the Government's specific approval, the problem still remains, how should the legislation be framed? In all the Dominions legislation prescribes that gold or foreign exchange or both should be held amounting at least to a certain minimum proportion of the central banks' notes or notes and deposits. Yet this form of legislation is clearly out of date, since it refers to a situation in which the holders of the central bank's notes and deposits—the people within the country—are likely to

come demanding gold coin: and today it is generally agreed that a central bank's reserve is not to meet this demand at all but to meet sudden demands for foreign assets. Since there is no reasonable means of ascertaining, in the form of a single figure or proportion, what these demands are likely to be there is no reasonable means of legally relating the size of the central bank's reserves to them.

Note Issues. The regulation of reserves is usually connected with the regulation of the note issue from which it should nowadays be largely or entirely separate. This connection is the result of the historical evolution of central banking in England and elsewhere. As matters stand today in the Dominions and most other countries there is no clear reason why the volume of note issue should be ultimately limited by the foreign assets held by the central bank; for the volume of note issue changes chiefly in response to the public's need for hand-to-hand currency. This volume may be related to the state of the country's international payments and thus to requirements for reserves of foreign assets; but the relationship is exceedingly distant and complex.

In a sense the note issue is fundamentally important to a central bank; and in another sense it is quite unimportant. It is important because, since central bank notes are legal tender and often, in these days, practically the only important form of legal tender money available, control of the note issue gives the bank control over what, in the last resort, is legally the basis of the whole financial system. The note issue is unimportant because in fact, either by law or by custom, the commercial banks keep their reserves chiefly in the form of deposits in the central bank rather than its notes. In practice it is the banks' reserves that lie at the basis of a country's credit structure and financial system. Thus, ultimately under the law, control of the note issue is fundamental; in fact, under prevailing customs, control of the banks' reserves is fundamental. No doubt the banks would be unwilling to keep reserves in the central bank if they were not assured that, if requested, legal tender notes would be forthcoming. A central bank's active efforts to control credit, however, and through credit control to influence the economic condition of the country, are nowadays directed towards varying the banks' reserves; and the note issue, serving the same lowly role as subsidiary coin, changes passively up and down in response to

the country's requirements for that particular form of monetary medium.

There are many different forms in which the note-issuing and credit-creating powers of central banks may be constitutionally restricted by their reserves of gold and foreign exchange. These usually serve three purposes: to provide some ultimate obstacle to inflationary practices, to ensure that reserves of gold and foreign exchange shall not be carelessly dissipated, and to inspire confidence in those few people who seriously think that their money would depreciate in value if not backed, up to a certain conventional proportion, by gold or something like it. If, as seems to be the case, there is no rational method of directly proportioning reserves of gold and foreign exchange to probable needs on account of international payments, then there may be something to be said for proportioning these reserves to the country's internal credit base. An expansion of the credit base is likely, sooner or later, to lead to an increased demand for foreign exchange; a contraction is likely to lead to a diminution. This base is the cash reserves of the commercial banks, whether held in the form of deposits in the central bank or in the form of its notes. Since central banks nowadays know what part of their note issue is in the hands of the public and what part in the vaults of the commercial banks, it should be quite feasible to proportion central bank reserves to the internal credit base. Nowhere, however, has this relatively logical and direct form of regulation been adopted. In Australia and England commissions have seen the stupidity of relating the whole note issue (including what is serving as credit base together with what is serving as a minor circulating medium) to central bank reserves; but they have recommended a legal maximum note issue without regard to reserves. In neither country has legislation followed the recommendation, perhaps because it would apparently allow too wide discretionary powers to the central bankers in the matter of holding reserves.

In England, however, legislation was passed in 1939 which, in substance although not in form, completely freed the central bank from the ultimate restrictive influence of its gold reserve. This legislation was similar to that adopted in Canada nearly four years earlier. It simply provided that the central bank's gold reserve should be valued at the current *market* price instead of a *fixed* price. If either Canada or England now embarked on a process of inflation,

the foreign exchange rate would depreciate and the market price of gold would rise. Likewise the market value of the gold reserves would rise. Increased issues of currency and credit would then become permissible. Thus a new round of inflation could be undertaken; and so on.

The fact is that, with the need for, and use of, "exchange equalization funds" by the treasuries of leading countries, any legal relationship between a country's central reserves of gold and exchange on the one hand and its note and credit issues on the other is likely to be over-ridden at any time as an archaic impediment to national monetary policy.

Profits, Losses, and Liquidation. It is a commonplace to say that a central bank is not a profit-seeking organization, that its concern is the public good and not the making of money. But there is more than this to be said about profits and losses. Various questions arise for consideration. Is a central bank, in its pursuit of the public good, likely to make profits or losses? If it makes profits, how ought they to be disposed? If it makes losses, how may they be met? If losses persist, should it be liquidated?

A central bank is normally profitable. A glance at the balance sheet of such a bank shows that most of the assets—loans, investments, etc.—produce revenue; and that, with little or no interest paid on deposits and only quite small expenses attaching to the issue and circulation of notes, the operating expenses are not substantial. The revenues are usually more than sufficient to cover them. A margin is left over in the form of profits which may either be put into a reserve fund or else distributed to the Government and, if there are any, to private shareholders.

While it is usual to make profits, it is quite possible to make losses. A central bank holds securities and foreign exchange. Both may fluctuate in value. In these days the valuation of the bank's stock of gold may also change. All these variations may bring abnormal losses or gains. The risk of such losses is, to some extent in all the Dominions, now assumed by the Governments; but it is still possible for some losses of this sort to fall on the central banks. Moreover, it is also possible for clumsy, inexpert management to turn normal operating profits into losses. If a central bank, during a slack period in its own business, is trying to keep in touch with the markets for securities and foreign exchange by buying a little here

and selling a little there, it can easily allow the changing prices of the market to eat up the revenues received in interest or exchange spreads.

If a central bank does incur losses, it is in a fairly strong position to recoup itself quite quickly. It is endowed with a number of functions of a monopolistic nature; and by raising its charges can increase its revenues. The outstanding example of this in the history of the Dominions was in South Africa in 1931-2.¹⁸ Some years earlier the Reserve Bank had secured an agreement with the gold producers by which it became the sole exporter of newly mined gold and thus the largest seller of foreign exchange. This semi-monopolistic position it used to recoup the losses which it suffered after September, 1931, when its large holdings of funds in London depreciated in terms of South African pounds. The loss amounted to £SA 1.5 millions. During the subsequent period of fluctuating exchanges a wide spread was maintained between buying and selling rates, and by March 31, 1932, this source alone had produced a revenue of £SA 0.6 millions. "We have off and on made a profit of 1½% to 2½% on the day's dealings," said the Governor.¹⁹ Thus, despite the fact that only a few months earlier an amount equal to all the declared and inner reserves and a part of the capital had been lost, a 6 per cent dividend was declared; much to the annoyance of some private shareholders who had sold out, not realizing how profitable a central bank could be if it tried.

Attention to possible losses leads us to consider the relevance to central banking of such familiar terms as "insolvency," "liquidation," and "bankruptcy." Take for instance the situation of the Reserve Bank of South Africa which has just been described. Would it have been advisable or possible for the Bank, which seemed in a precarious position, to be "liquidated" or "wound up"? The Government would hardly wish to relinquish the control of currency and credit in such an unsettled time. In the public interest the private shareholders could hardly be permitted to decide the matter. And further, was the Bank in danger of becoming "insolvent"? How could it be, because its promises-to-pay (notes) were legal tender? Should it have been put through "bankruptcy"? Surely none of

¹⁸Report of the Twelfth Ordinary General Meeting of the South African Reserve Bank, 1932, pp. 14-20

¹⁹Ibid., p. 15.

the clients of the Bank—the Government and the commercial banks—would or could refuse to utilize its services. Surely none of the creditors could hope for anything better than legal tender money which was theirs for the asking.

The Government of New Zealand was advised to establish a central bank which (subject to parliamentary confirmation) would "go into compulsory liquidation" if it lost more than half its capital or if two-thirds of the shareholders so resolved. This seems to imply a very inadequate knowledge of the place of capital and reserves in central banking, and indeed in commercial banking. It also implies that there is a *prima facie* case for permitting the private shareholders to wind up the bank if they find the project tiresome or unprofitable. However, the advice was not taken. In all the Dominions the initiative of winding up the central banks lies explicitly or implicitly with the Government.

If a central bank normally makes an operating profit, and can make a very large profit if it desires, the question arises, how much profit should it make? What criteria should guide this "state monopoly"? Probably the best principles would be as follows. On all its competitive operations, when it is buying and selling in the open market in competition with concerns which are primarily profit-making, it should adopt their criterion and do as well for itself as possible. On its monopolistic operations—the setting of rates for loans and rediscounts to the financial system, the charges (if any) for note issues, the fixation (in some countries) of the level of buying and selling rates for exchange—on such operations as these its concern should be entirely for public policy and not at all for profit.

It is interesting to record that some of those who offered supposedly expert advice to the Dominions from abroad were so confused regarding the proper attitude of a central bank towards profits and losses that they recommended financial penalties upon the proposed bank if constitutional limitations upon the note issue were exceeded. This was the case in South Africa and New Zealand. Moreover the advice was taken. The legislation might have had more point if the penalties for disobedience had been imposed upon the directors or officers responsible; for while the extent of the bank's profits ought not to be an important concern to them, their own financial position must be.

Capital and Reserve Funds. Private and corporate business ventures such as commercial banks need capital in their early days from owners and shareholders in order to start operations; and later it may be expedient to expand the amount of direct capital investment in the concern rather than to secure on loan the funds required for extensions and other purposes. In addition current profits are often employed, instead of being distributed as dividends, when a business is growing; if their employment is disclosed in the balance sheet they appear as a reserve fund (or, in banks, as "rest" to distinguish them from cash reserves), if undisclosed they become secret reserves. The existence of a large capital and large reserve fund, secret or disclosed, indicates that much money has been invested in the concern in the past. In that sense capital and reserve fund give "strength" to a business. Moreover, if past profits have been reinvested, the possibilities of future profits should be increased.

It must be emphasized, however, that the real strength of a commercial bank, its ability to meet losses or withstand sudden demands, is *not* to be measured by the aggregate of its capital and reserve funds. Its strength lies in the nature of *all* its assets viewed in relation to *all* its obligations. Its secret reserves and disclosed reserve fund may enable it to put on a better face in bad times, to make the balance sheet appear more creditable than would otherwise be possible. For instance, the ugly words "deficit" and "impairment of capital" will not appear in the balance sheet until losses exceed these resources. But despite the danger to a commercial bank of anything which impairs its good name and trustworthiness, the wording of the balance sheet is a matter of relatively minor importance. The fundamental strength of a bank lies, we repeat, in the nature of all its assets viewed in relation to all its obligations.

We are now in a position to ask whether a central bank derives any benefit from its capital, or from the disposal of profits into a reserve fund or a secret reserve.

First of all, consider capital. The Commonwealth Bank of Australia started business with a loan from the Government. This source of initial funds is not available to private enterprises, but it is to government institutions; and seems satisfactory for the purpose of making the expenditures necessary for beginning operations. From this point of view we conclude that a central bank does not need capital.

After twelve years had passed a Government endowed the Commonwealth Bank with a capital of £A 4 millions, which might be increased up to the very large sum of £A 20 millions. The declared object was to give the bank "due standing and power."²⁰ We shall consider later how far it is desirable to dress a central bank up like a commercial bank in order to give it standing. As for giving it power, it is, as we have seen, very doubtful whether the power even of a commercial bank is increased by its capital; but it is certain that capital gives no extra power to a central bank except in a very special sense described in the next paragraph. It has the right to issue legal tender money. It therefore has the power, by creating the money, to purchase whatever assets it needs and to pay whatever debts it incurs.

However, in a peculiar sense the raising of capital and the accumulation of a reserve fund may assist a central bank. It makes the local banks and capital market more dependent upon the central bank's support and more susceptible to its control. When the central bank accumulates profits or receives subscriptions to its capital, the funds involved are, in effect, withdrawn from the capital market; and these, in this age when most payments are made by cheque, will come from the cash reserves of the commercial banks. Normally the central bank will proceed to buy securities in the open market, thus restoring the commercial banks' reserves, in order that general financial stringency shall not result from the increase of its capital or undistributed profits. In short, it will indirectly create the funds utilized for its capital or profits. In doing so it accumulates securities or other assets. In this way it acquires a greater quantity and, perhaps, a greater variety of assets, any of which can be disposed of if the bank, in the future, wishes to restrict and regulate the financial system.²¹

²⁰The Hon. Earle Page, *The Commonwealth Bank Bill*, speech in the House of Representatives (Melbourne, June 13, 1924), p. 30.

²¹There are many combinations of possibilities regarding the final outcome of raising capital or accumulating reserves. It depends upon who subscribes the capital, who would get the profits if they were distributed instead of accumulated, what sort of securities the central bank purchases in order to replenish the reserves of the commercial banks, whether these securities carry a higher yield than central bank stock (if such stock is sold to the public and the dividends on it are legally limited) and so forth.

Incidentally, it may be noted that the transfer of note issuing powers from

Secret Reserves. The directors of a commercial bank may dispose of undistributed profits either in the form of a disclosed reserve fund or in the form of an undisclosed or secret reserve. The directors of the central banks of Canada, New Zealand, and South Africa are instructed, by constitution, to follow "ordinary banking practice" in making provision for bad debts and other eventualities; and the Governor of the Reserve Bank of South Africa has quoted this to explain his accumulation of secret reserves.²² It appears that the Reserve Bank of New Zealand has also engaged in this practice.²³

It is a matter of controversy whether it is expedient, indeed whether it is moral, for the directors of a private bank or other private enterprise to employ the device of a secret reserve. Should directors have the right to conceal the full extent of a company's profits and losses? Is it, in the long run, in the interests of the public or the shareholders that such information should be withheld? Whatever be the answers to these questions in the field of private finance, there is little room for argument when they are applied to public concerns. Surely the fullest, clearest, and most truthful financial statement ought to be given. Only by such means can a check be kept upon the bureaucratic use of public money.

Conclusion. The general conclusion of these rather disconnected comments is to emphasize the difference between commercial banking and central banking. This difference is generally accepted nowadays amongst those who write about central banks and those who operate them. But the difference is greater than many people seem to believe; and thus it comes about that, on a number of quite important points, the accepted principles of central banking are out of harmony with modern practices.

The differences between commercial and central banking are both political and financial. On the political score, it must be recognized that at the present time a central bank is one of many organs by which the modern state regulates economic life. Each organ of

the commercial banks to the central bank confers new power to the central bank in the same sense as subscription to its capital. So do the deposits which commercial banks make in a central bank. These matters are discussed in more detail in later chapters.

²²*Report of the General Meeting, 1932*, p. 16.

²³D. O. Williams, "The Reserve Bank of New Zealand (review of the Report of the First Ordinary Meeting)" (*Economic Record*, vol. XI, no. 21, Dec., 1935, pp. 272-6).

regulation has its own peculiarities, adaptations to its environment and purpose; and central banks must have their own distinctive features. In principle and performance, however, they must remain organs of state control; not private corporations presided over by groups of persons who, however good their intentions, are legally irresponsible.

On the financial score, also, the cleavage between central and commercial banking in the modern world runs very deep. Quite enough has been said to illustrate the paradox that while the balance sheet of a central bank is similar to that of a commercial bank, the two types of institution differ widely. Each usually has a capital and reserve fund, receives deposits, invests in liquid assets, and keeps a cash reserve; but the cash reserves are of a different nature, the liquidity of the assets serves a different purpose, the volume of the deposits changes upon different principles,²⁴ and the capital and reserve fund impart a different sort of strength. The fundamental difference lies in the fact that a commercial bank is essentially an intermediary, receiving funds on the one hand and distributing them on the other, while a central bank is essentially a source both of legal tender money and of cash reserves, in the first instance for the commercial banks and thus ultimately for the financial system at large and the general public. Thus to commercial banks the acquisition of capital, the building up of reserve funds, and the right to issue notes actually give power to make more loans and investments; to central banks these things give, not more power in the absolute, but only more power to expand loans and investments *without causing undesired inflation*.

Terms such as capital, reserve funds, deposits, liquidity, and the rest, are thus likely to be misleading when they are applied to central banking. And yet there is something to be said for a public institution which parades as a commercial one in a world which is not fully committed to state control and in a financial community that is generally opposed to state intervention. A freak never gains prestige; and much of a central bank's effectiveness depends upon its persuasiveness. Thus some good may be done by creating a machine of monetary control which looks rather like a commercial

²⁴As part (3) of this Introduction showed, the deposits of a central bank can usually be increased or decreased by its own open market operations. In the case of a commercial bank, the volume of its deposits is not directly under its own control.

Secret Reserves. The directors of a commercial bank may dispose of undistributed profits either in the form of a disclosed reserve fund or in the form of an undisclosed or secret reserve. The directors of the central banks of Canada, New Zealand, and South Africa are instructed, by constitution, to follow "ordinary banking practice" in making provision for bad debts and other eventualities; and the Governor of the Reserve Bank of South Africa has quoted this to explain his accumulation of secret reserves.²² It appears that the Reserve Bank of New Zealand has also engaged in this practice.²³

It is a matter of controversy whether it is expedient, indeed whether it is moral, for the directors of a private bank or other private enterprise to employ the device of a secret reserve. Should directors have the right to conceal the full extent of a company's profits and losses? Is it, in the long run, in the interests of the public or the shareholders that such information should be withheld? Whatever be the answers to these questions in the field of private finance, there is little room for argument when they are applied to public concerns. Surely the fullest, clearest, and most truthful financial statement ought to be given. Only by such means can a check be kept upon the bureaucratic use of public money.

Conclusion. The general conclusion of these rather disconnected comments is to emphasize the difference between commercial banking and central banking. This difference is generally accepted nowadays amongst those who write about central banks and those who operate them. But the difference is greater than many people seem to believe; and thus it comes about that, on a number of quite important points, the accepted principles of central banking are out of harmony with modern practices.

The differences between commercial and central banking are both political and financial. On the political score, it must be recognized that at the present time a central bank is one of many organs by which the modern state regulates economic life. Each organ of

the commercial banks to the central bank confers new power to the central bank in the same sense as subscription to its capital. So do the deposits which commercial banks make in a central bank. These matters are discussed in more detail in later chapters.

²²*Report of the General Meeting, 1932*, p. 16.

²³D. O. Williams, "The Reserve Bank of New Zealand (review of the Report of the First Ordinary Meeting)" (*Economic Record*, vol. XI, no. 21, Dec., 1935, pp. 272-6).

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²⁴As part (3) of this Introduction showed, the deposits of a central bank can usually be increased or decreased by its own open market operations. In the case of a commercial bank, the volume of its deposits is not directly under its own control.

bank; which has a board of directors, which makes profits and seems to be in a position to withstand losses.

But it would clearly be inexpedient, if monetary control is the object, to sacrifice any essential principles in order to pander to prejudices. Moreover, the impression must not be left with the reader that those who erected the Dominion central banks fully realized the incongruities and anachronisms of the accepted form of central banks. From what evidence is available it seems that many expert advisers, together with the political leaders who introduced central banking legislation, acted in the belief that the accepted form of constitution was a necessary adjunct of accepted central banking practices. It was not generally realized how much of the accepted form was a remnant of the days when certain of the older central banks, and notably the Bank of England, were chiefly concerned with ordinary commercial banking business.

PART I

THE CENTRAL BANKS IN THEIR CAPITAL MARKETS

CHAPTER I

THE CAPITAL MARKET AND THE RESERVE BANK OF SOUTH AFRICA

IN the past forty years the whole of the economic structure of modern South Africa has been built upon a foundation of gold. It would be difficult to find another country so far from the pioneer stages of development and yet so dependent upon a single commodity. Nowadays the proportion which gold contributes to the value of South African exports surpasses two-thirds. Probably a not much smaller proportion of the national income is derived from gold mining together with occupations more or less dependent upon it. Apart from mining and these occupations the country is still, despite considerable tariff protection for certain local manufactures, largely agricultural and pastoral. The population is thinly spread, except for its concentration in the mining areas and at the sea ports.

(1) FINANCIAL INSTITUTIONS¹

Commercial Banks. Through their widespread system of branches the South African banks do business of considerable variety. In the British tradition, they regard as their proper concern the extension of short term, self-liquidating commercial credit: but the South African economy, with its dependence upon gold mining on the one hand and agricultural and pastoral activities on the other, offers limited opportunities for lending of this type. Accordingly, the banks normally "advance money for all purposes, long term, intermediate and short term, under the cloak of 'over-drafts' which are nominally payable on demand."² The chief banks seem willing to devote amounts equal to their capital, reserve funds and a portion of their savings deposits to loans which might pro-

¹See E. H. D. Arndt and C. S. Richards, "The Banking System of South Africa" (*Foreign Banking Systems*, edited by H. Parker Willis and B. H. Beckhart, New York, 1929); also E. H. D. Arndt, *Banking and Currency Development in South Africa (1652-1927)* (Cape Town, 1928).

²Arndt and Richards, "Banking System of South Africa," p. 978.

perly be considered long term. However, with economic diversification opening up new demands for shorter term credit, it is said that the banks have been allowing an increasing amount of the longer term accommodation to pass into the hands of insurance companies and other institutions which can more safely undertake long term commitments.

The banks supply loans to finance stock exchange transactions; a margin of 50 per cent usually being required even on well-seasoned securities paying dividends, and higher margins upon less satisfactory collateral. The banks also discount bills of exchange, operate current accounts, undertake collections on behalf of their customers, and provide a market for foreign exchange. In addition, they perform a number of services not so typical of commercial banking but indicative of the relatively unspecialized and undeveloped state of financial organization in the Union. For instance, they undertake the management of estates. Each of them has a savings department, the funds of which are merged into the general business of the bank.

The degree of banking concentration is very high indeed. At the end of 1936 two banks controlled £SA 174.3 millions out of the £SA 181.0 millions at the disposal of the eight South African commercial banks. A further £SA 4.8 millions belonged to a third bank, so it can be seen that the remaining five, controlling less than £SA 2 millions, were of little financial importance. The figures just given may exaggerate the importance of the larger banks because much of their business, perhaps more than half in the case of Barclay's (Dominion, Colonial, and Overseas), is done outside the Union. Official figures do not reveal the exact comparative situation of the banks' local business: but at the end of 1936 the eight commercial banks had made loans and advances in the Union of some £SA 44 millions, and the total loans and advances of the six smaller banks amounted to less than £SA 3 millions. Thus it is clear that the two big banks do the vast majority of the business of the country.

The head office of each of the three important banks is outside the Union. The two biggest have their head offices in London: the Standard Bank of South Africa and Barclay's (D.C. and O.). The Netherlands Bank has its main office in Amsterdam. The two British banks used to keep most of their liquid resources in London. They used to look to London as a source of liquidity, lacking both

marketability and self-liquidation in so much of their South African business; and they also looked to London as a repository for surplus funds which, in the absence of a suitable demand for loans, could only with difficulty be disposed in the narrow South African capital market. Recently, however, and more particularly since the depreciation of sterling in 1931, the banks have become accustomed to keeping an approximately balanced position, their assets in the Union roughly equalling their liabilities there. The existence of the Reserve Bank, a local source of liquidity in time of need since 1930 at any rate, has no doubt influenced their behaviour. But old customs still prevail to the extent that they apparently consider their capital and reserve funds to be domiciled in London so that their assets held in liquid form in that centre far exceed their liabilities there (excluding capital and reserve).

An accompanying table indicates the chief assets and liabilities of the banks.

**CHIEF ASSETS AND LIABILITIES OF COMMERCIAL BANKS OPERATING IN
SOUTH AFRICA***

December 31, 1937

Assets	Total £SA 000,000	In the Union £SA 000,000
Balances with the Reserve Bank.....	16.9	16.9
Union Government securities.....	10.6	10.2
British and Colonial Government securities.....	33.2	....
Bills under discount.....	17.2	9.9
Loans and advances.....	66.8	48.3
 <i>Liabilities</i>		
Capital paid up.....	8.2	0.1
Reserve fund.....	5.4	0.1
Savings bank deposits.....	10.8	5.8
Fixed deposits.....	40.4	21.8
Current deposits.....	96.4	65.5

*Figures from the *Official Year Book of the Union of South Africa*, 1938, pp. 645-6.

*Insurance Companies.*³ In this field, also, there is considerable concentration. A substantial portion of the business is done by

³See E. H. D. Arndt, "An Analysis of the Investment Policies of Life Insurance Companies in the Union of South Africa" (*Publications of the University of Pretoria*, series III, no. 1, 1937).

companies with head offices, and their main interests, outside the Union. At the end of 1934 life insurance companies held in the Union assets amounting to £SA 59.4 millions. Of these, £SA 17.9 millions were controlled by companies with head offices elsewhere. A further £SA 24.7 millions belonged to the South African Mutual Life Assurance Society, and £SA 6.7 millions more to the Africa Life Assurance Society, Ltd. These were the two biggest South African companies and there were fourteen smaller ones doing business as well.

The insurance companies invest large amounts in mortgages. (In 1934 mortgages represented 29.6 per cent of the assets of the South African companies.) Most of this is ordinary mortgage business, urban and rural; but at least one company, which is part of a great interlocking aggregation of businesses, has lent more than 50 per cent of its resources on mortgage to associated institutions. South African law prescribes no regulation of this practice and no restriction of mortgage margins.

Other outlets for funds are policy loans (14.7 per cent of the assets of South African companies in 1934) which are popular in South Africa, "especially with those who are anxious to avail themselves of the frequent speculative opportunities offered by this country."¹⁴ Direct loans to municipalities are an important part of the business of some companies (9.6 per cent of the assets of South African companies in 1934); the unusual extent of this business in South Africa being an indication of the narrowness of the security market and the prevalence of direct banker-customer relationships. Another indication is the almost total absence of security holdings apart from investments in government and municipal issues.

Trust and Loan Companies. Most of the concerns which are incorporated as trust companies augment their revenues by engaging in other types of business as well—insurance, auctioneering, real estate, etc. On the other hand, trustee business is carried on by individuals, attorneys, the commercial banks, and other concerns. It is clear that this business is not highly concentrated or specialized.

¹⁴*Ibid.*, p. 15. In private correspondence Professor Arndt added: "Policy loans by insurance companies are believed to be largely destined for stock exchange speculation. They are popular because no questions are asked as to the object of loans."

*Land and Agricultural Banks.*⁵ The Land and Agricultural Bank of South Africa was established in 1912 by the Union Government; and into it were merged similar institutions which, before Union, had been established in three of the four uniting colonies. The directorate is appointed by the Government. All of its long term funds are obtained in the form of government grants but it obtains seasonal credit from the commercial banks. Votes of government moneys have been made annually, almost without exception; their size depending upon the contemporary affluence of the Government and, at times, upon the urgency of agricultural needs.⁶ Funds are supplied for most agricultural purposes, with the notable exception of breeding and fattening livestock. They are made available to individual farmers and to co-operative societies. In 1934 and 1935 there was some discussion of a proposal that the Land Bank should be converted into a mortgage bank with a board of directors independent of the Government.⁷ The proposal never got very far, however; perhaps chiefly because an independent bank could not have supplied funds to the farmers as cheaply as the Government.

Agricultural credit is supplied directly by the Government for certain purposes. The Lands Department makes advances to settlers for the purchase of land; the Irrigation Department provides funds for large irrigation projects.

*Savings Banks.*⁸ Savings deposits are accepted by several types of institution. These are shown in a table on p. 50. The savings banks include four "people's banks," which are run on the semi-cooperative lines followed by credit unions in other countries. Their main object is to give assistance to people who might be forced to borrow from money-lenders at exorbitant rates. Another savings bank is operated as a department of the Africa Mutual Trust and Assurance Company, Ltd.

The money obtained by the Government through the Post Office

⁵A number of articles on agricultural credit by E. H. D. Arndt and others will be found in the *South African Journal of Economics*, vols. I-IV.

⁶See an article in the *London Statist*, Nov. 14, 1931.

⁷See *Report of the Commission on Co-operation and Agricultural Credit, 1934* (U. G. 16, '34); also article in the *Cape Times*, Jan. 24, 1935.

⁸See E. H. D. Arndt, *Banking and Currency Development in South Africa (1852-1927)* (Appendix on "The Rise of Savings Banking in South Africa").

SAVINGS DEPOSITS IN VARIOUS SOUTH AFRICAN INSTITUTIONS*

	£SA 000,000
Post Office Savings Bank (1935-6).....	16.2
Current accounts.....	13.0
Certificate accounts.....	3.2
Union Loan Certificates outstanding (March 31, 1937).....	8.4
Deposits in savings departments of commercial banks (December 31, 1936).....	5.5
11 savings banks (1935-6).....	2.7
69 building societies (1934-5).....	14.1

*Figures taken from the *Official Year Book of the Union of South Africa*, 1937, chap. XVI.

Savings Bank and the issue of loan certificates is not allocated to any specific purposes but simply goes into the consolidated fund. Likewise, the savings deposits of the commercial banks are merged into the general funds of the banks. More than two-thirds of the assets of the savings banks are in the form of loans against mortgage and other collateral; but they also have some securities, which in 1935-6 amounted to about £SA 0.5 millions.

Building Societies. These are amongst the most successful forms of credit institution in South Africa; and in recent years their business has expanded rapidly. At the end of 1935 there were 69 companies in operation; 51 being permanent and 18 terminable. Their chief assets and liabilities were distributed as the table shows.

CHIEF ASSETS AND LIABILITIES OF 69 BUILDING SOCIETIES OPERATING IN SOUTH AFRICA*
(1934-5)

<i>Assets</i>	£SA 000,000
Loans.....	26.0
Fixed property.....	1.2
Cash on fixed and current account.....	1.9
Securities (government, municipal, and other).....	3.6
<i>Liabilities</i>	
Paid-up capital.....	15.8
Deposits.....	14.1
Reserve fund.....	1.3

*Figures compiled from the *Official Year Book of the Union of South Africa* 1937.

The societies operate under legislation which prescribes the type of loans which they may make, the security which must be taken

against loans, and the minimum proportion which their capital and their liquid assets (cash and securities) must bear to their deposit liabilities.

(2) THE CAPITAL MARKET

Market for Mining and Industrial Shares. The attention of South African investors, big fish and small fry alike, is directed toward the Johannesburg stock exchange. In that centre is concentrated most of the dealing in the securities of mining and other industries. Transactions on the Johannesburg exchange must far exceed those associated with any other financial business in the Union. This exchange is a focus of national interest; at once reflecting and diffusing the country's fortunes. South Africans have a strong speculative impulse; a trait held in common by people in newly exploited areas of rich resources and especially in areas associated with gold mining. Timid souls may salt their savings away in government securities; but this is generally left to trustees and others whom the law forbids to flutter. And when times are booming even the timid may be tempted to divest themselves of their gilt-edged securities⁹ and go in for gold.

The Johannesburg exchange offers a broad market for trading in the issues of private companies; but it is not the sort of market which easily lends itself to influence by a central bank. Stock markets are always liable to speculative extremes, especially those associated with mining ventures. Modern experiments in the control of stock market activities relate to the volume of speculation and the trend of prices on the one hand and to the quantity and quality of new issues on the other. The South African market would provide, not only the normal problems which beset any attempt to regulate or regularize an essentially speculative business, but also special obstacles to both forms of control.

The prices at which shares are traded would be specially intracable in South Africa for two reasons. Most of the active shares are traded equally easily on the "Kaffir market" of London and may also find a market in Paris and elsewhere. They move freely in and out of the country. A South African authority which attempted to "curb undue speculation" or to "restrain an unjustified rise of

⁹Cf. E. Landsberg, "The Present Position of Investment Funds and Government Loan Expenditure in South Africa" (*South African Journal of Economics*, vol. IV, Sept., 1936, p. 347).

prices" on the exchange would be faced with the problem of modifying or offsetting the actions of traders half the world away. Further, the technique of restraint which is orthodox (and almost invariably ineffectual) is the restriction of credit and the increase of local interest rates. The effectiveness of these measures would be specially small in South Africa¹⁰ because, for special reasons, the proportion of trading for cash is higher there than elsewhere, the proportion of stocks bought on margin is lower, and the amount of credit required to support a rising market is less. Moreover, some of the sources of credit are remote from central bank control. Although the greater part is normally secured from the local banks, credit to finance speculation may also be obtained, particularly in prosperous times, from two other places. At home there are the accumulating profits of gold mining groups and other companies and the policy loans of insurance companies; abroad funds may be borrowed through the foreign offices or agencies of the local brokers and traders.

So much for the control of prices, a topic sufficiently remote from possibility to have received little discussion. Regarding control of new issues more has been said.¹¹ The task of a supervisory or censoring body is difficult in any country; it is more difficult in a country which is dependent upon the exploitation of natural resources; it is most difficult when those resources are minerals. And moreover, even if a body existed to exercise wise discrimination over the new issues, interested parties might escape the censorship, possibly at some expense, by floating their issues in London or elsewhere instead of in Johannesburg. For these reasons, and perhaps for others as well, the control of the most important section of the South African capital market has generally seemed impracticable. On the other hand, precisely the reasons which make control difficult also make its introduction desirable; and because large numbers of the public invest in stocks, measures to protect them against abuses are the more justifiable.

¹⁰See M. H. Emdon, "Credit Facilities on the Johannesburg Stock Exchange" (*South African Journal of Economics*, vol. III, 1935, pp. 43-56).

¹¹E.g. E. H. D. Arndt, "Safeguarding the Investor" (*Publications of the University of Pretoria*, ser. III, no. 6, 1938). C. G. W. Schumann, *Structural Changes and Business Cycles in South Africa* (London, 1938), p. 336, goes so far as to suggest control of speculation.

Mining Groups. If it is true that the economic structure of South Africa has been dominated by gold mining, it is equally true that the development of mining has been dominated by about ten important financial groups. Their names are internationally famous: the Central Mining—Rand Mines Group; the Anglo-American Corporation of South Africa (which has drawn transatlantic support from the J. P. Morgan interests); the Union Corporation; the New Consolidated Goldfields of South Africa (which is the outgrowth of the interests of Cecil Rhodes); and others. Such groups as these have access to the lending resources of the several great capital markets of the world.

The interests of the groups, while originating in gold mining, have spread far beyond. The activities of the Johannesburg Consolidated Investment Company may illustrate their diversity. At the general meeting in November, 1936, the chairman called attention not only to the fact that companies in the group were producing one-quarter of the output of gold on the Rand, but also to a number of other ventures. The interests of the group extended into the production of cement, three collieries, diamond mining, copper fields, platinum mines, a carbide company, a brewery, and two hotels. Most diverse in its interests is the New Consolidated Goldfields, Ltd. Pages of print would be required to enumerate its ramifications.

When a new enterprise is being undertaken by a group it will, in all probability, eventually emerge as a joint stock company on a more or less independent basis. But it will be initiated and in its embryonic stages it will probably be completely owned and directed by the group. The expenses of exploration or organization will probably be financed out of current or accumulated profits, or from other sources. When it is approaching or has reached the stage of being a going concern, shares in it will be sold to the public. The group will retain some of the shares and the right to appoint some, although usually a minority, of the directors. The influence of these directors is usually greater than their minority position suggests.¹²

It must not be inferred that all gold mining development, far less all the development of other industries, has been undertaken and initially financed by the groups. This would be far from the truth.

¹²L. C. A. and C. M. Knowles, *The Economic Development of the British Overseas Empire* (London, 1936), vol. III, "The Union of South Africa," pp. 233-4.

A number of independent companies have been formed and are successfully operating. Especially in prosperous times, when the stock market is rising, it is possible to float independent issues. Nevertheless, a description of the financial organization of South Africa which did not lay great emphasis on the groups would be ill-balanced.

Market for Government Stock, Debentures, and Bonds. The narrowness of this market stands in contrast to the breadth of the South African share market; indeed the importance of the latter is clearly one of the chief causes of the inconsequence of the former. The bonds and debentures which are available fall into three groups. There are a few industrial debentures; but the supply is almost negligible because of the predominance of the share as a method of obtaining funds. There are the issues of various municipalities and official boards and commissions, some of them with a very high credit standing. And lastly there are securities which are issued or guaranteed by the Union Government itself. No securities are issued by the four provinces, all borrowing on their behalf being done by the central Government.¹³

Dealings in these securities are chiefly in Cape Town, where local members of the Johannesburg exchange meet in the premises of the Cape Town exchange which was disbanded in 1926. The list of the institutions which participate, frequently (let alone constantly) buying and selling in the market, is as limited as the list of securities in which they deal. The commercial banks at the end of 1936 held less than £SA 13 millions of securities of various sorts in South Africa. The head offices of the two predominant banks are in London, and it is in that centre (the balance of payments permitting, as it usually does) that they are accustomed to hold most of their marketable assets. The amount of securities which they held in South Africa in 1936 was much larger than usual; yet three or four times that amount was held in London. Other purchasers of debentures in South Africa are the insurance companies. At the end of 1935 they held £SA 11 millions of Union government and £SA 6 millions of local government securities; and £SA 1 million of miscellaneous issues. Other investors include trust funds, companies, and individuals. Most important are the Public Debt Commissioners.

¹³For a summary of the number of issues of various types listed on the Johannesburg exchange, see Arndt, *Safeguarding the Investor*, p. 28.

They probably hold more than half the internal debt of the Union,¹⁴ which at the end of March, 1936, was £SA 128 millions. Their total holdings amounted to more than £SA 100 millions. In general, gilt-edged securities are bought and held, in South Africa, as investments; and the greater part of the issues are thus immobilized.

All these things point to a narrow unresponsive market. That such a situation exists was amply demonstrated by recent events. Between 1933 and 1937 the prosperity of the country produced embarrassment in the gilt-edged market. The Government gained sufficient revenue from the booming gold mines and a prosperous country to be in a position to redeem debt rather than to float new issues. Meanwhile the banks, insurance companies, debt commissioners, and trustees, forced by prudence or by law to invest in trustees securities, sought outlets for their rapidly accumulating funds. Acute shortage of local securities might have arisen had not the Government adopted the expedient, facilitated by a heavily favourable balance of trade, of redeeming debt in London and floating new issues in South Africa.

Bill Market and Short Term Lending. The first of these two topics is only named by courtesy; for in spite of years of exhortation and effort the Reserve Bank produced nothing that can be called a local market for bills. Its unsuccessful attempts are described later in this chapter. Much of the external trade of the Union apart from gold is, of course, financed by means of bills; and at any time a number of these will be owned by the commercial banks and a few of them by the Reserve Bank; but in so far as these bills circulate in any market it is in London and not in the Union. Time was, apparently, before the collapse of the diamond boom in the eighteen-eighties, when much internal trade was financed by bills: but the collapse gave such a blow to credit that merchants for some time dealt with each other only on a strictly cash basis. With revival in the eighteen-nineties, based upon gold, the system of borrowing from the banks on overdraft was widely introduced; and came to stay.¹⁵ Indeed, many of the banks' loans, particularly in the rural

¹⁴Roughly estimated from figures in the *Official Year Book of the Union of South Africa*, no. 17, 1934-5; and from others given by Landsberg, "Investment Funds and Government Loan Expenditure in South Africa," pp. 348-9.

¹⁵A. Plant, "The Relations between Banking and the State in the Union of South Africa" (*London Essays in Economics in Honour of Edwin Cannan*, edited by T. E. Gregory, London, 1927, p. 87).

areas, are unsecured, or secured only by such illiquid collateral as mortgages on land.¹⁶ Even call loan rates, which considering the high development of the Johannesburg stock exchange might have been expected to be extremely sensitive and responsive, are subject to special arrangements between bankers and their customers and apply to a relatively small volume of loans.¹⁷

Various rates are paid for deposits received upon different terms and conditions by several types of institution. The commercial banks receive fixed deposits from business clients; and personal savings may be deposited in their savings departments, in the savings banks, in the Post Office Savings Bank, and in other institutions described in the preceding section of this chapter. The rates on deposits are quoted by various institutions, and are available to all clients. The commercial banks move their rates only after agreement amongst themselves and there is similar consultation between most of the other institutions. To some extent there is competition between the various types of depository, and rates in general tend to move in concert, although sluggishly.

Treasury bills are issued by the Union Government; but there is no market for them, practically all the bills being held until maturity by the original purchasers. The rate on these bills has never been determined by competitive tenders, but always by the Treasury, no doubt in consultation with the Reserve Bank. They are distributed to the banks and Public Debt Commissioners and, when the volume suffices, to other applicants. An important function of the treasury bills issued to the banks is that they facilitate semi-annual lease payments by the mines to the Government. The mines accumulate balances at the commercial banks in fixed deposits maturing on the dates of lease payments; while the banks invest in treasury bills maturing on the same dates. On these dates, therefore, the fixed deposits and the bills disappear simultaneously, so that payments are made without any disturbance to the market.

¹⁶Ibid. Professor Plant says that, at the end of 1921, two-fifths of all bank loans and advances in South Africa were unsecured; and he associates the difficulties and eventual demise of the National Bank with this state of affairs. The *Official Year Book* shows that at the end of 1935 the proportion was less than one-seventh.

¹⁷M. H. de Kock, *The Functions and Operations of Central Banks with Special Reference to the South African Reserve Bank* (Cape Town, 1929), pp. 42-3. See also Emdon, "Credit Facilities on the Johannesburg Stock Exchange."

Foreign Exchange Market. The price of foreign currencies has never since the formation of the Union, and probably not before that, been proximately determined by the interplay of demand and supply. It has never been directly dependent upon the competitive bidding of buyers and sellers. The rate has never been a market rate, but has always been published by the commercial banks, following the lead of the Reserve Bank and before its establishment by agreement between them. Indeed, widespread dissatisfaction with the behaviour of the commercial banks in this regard was one of the immediate causes of the establishment of a central bank. To some extent the Reserve Bank has fulfilled the hopes of those of its sponsors who wished for more competition in the market.

Neither before nor since the establishment of the Reserve Bank have all foreign exchange transactions gone through the machinery which has just been described. Various big exporters have from time to time disposed of their exchange outside the banks; but the practice has seldom been of much importance. The diamond producers developed the custom, before the War, of selling the sterling exchange which they acquired to big importing houses and to municipalities with obligations in London. The rate agreed upon was midway between the banks' buying and selling rates; so that each party saved half the spread set by the banks. The latter have naturally discouraged such devices for dispensing with their services. To the largest sellers of all, the gold mines, which today by agreement sell their product to the Reserve Bank, they used to offer a rather better price than to other sellers of sterling. The mines, on the other hand, were afraid to "shop round" for still better prices because, with so much to sell, they faced the possibility of having to dispose of a residue to the banks on disadvantageous terms. Much more recently, in 1933, it is reported that the banks have incurred unpopularity by refusing their services or by imposing extra charges upon the accounts of any clients who operated a private exchange business.¹⁸

The rates quoted by the Reserve Bank, and followed by the commercial banks, must over periods of years conform to the general movements of supply and demand; but for shorter periods they can

¹⁸*Financial News* (London, Jan. 8, 1934). The remedy proposed was an extension of the activities of the central bank.

and do remain largely immobile. The policy usually followed by the central bank is to maintain stable relationships between the South African pound and sterling. The exchange rates quoted by the Reserve Bank are for telegraphic transfers; and a spread of $\frac{1}{2}$ per cent is maintained between buying and selling rates. This spread is wide enough to allow some competition amongst the banks who might buy and sell at rather finer rates; but they are not expected to do so nor is their position, as chronic purchasers of exchange from the Reserve Bank, such as to require dealings between them. There are no exchange brokers in the market. The purpose of the artificially wide spread maintained by the Reserve Bank is not to permit competition but to discourage speculative influxes and effluxes of funds. In practice it contributes to the profits of the banks, central and commercial. In New Zealand, where the central bank has habitually published rates with a similar spread vis-à-vis sterling, the commercial banks have usually published rates with a spread narrower by half.

If it had to rely upon accepted means of control the Reserve Bank might be hard put to it to maintain its policy of exchange stability; for the success of accepted operations depends, as the Introduction indicated, upon the existence of a well-developed market, and this does not exist in South Africa. But actually control is possible. The dealings were so highly concentrated, so nearly monopolized, that when the central bank arrived, supported by the strong arm of the Government, it found relatively little difficulty in persuading the banks to adjust their rates to suit its policy. The central bank's strong position vis-à-vis the commercial banks and its control of the exports of currently produced gold have given it the necessary influence over short term movements of the exchange. Whether it is in a position to affect the more fundamental economic forces which, over periods of years, influence the rate, we are not, at this stage, ready to decide.

(3) THE SOUTH AFRICAN RESERVE BANK¹⁹

The Reserve Bank was established by legislation of 1920 and opened for operations in June, 1921. Despite the lack of develop-

¹⁹See Arndt, *Banking and Currency Development in South Africa (1652-1927)*; also de Kock, *Functions and Operations of Central Banks*; also (Sir) Henry Strakosch, "The South African Reserve Bank" (*Economic Journal*, vol. XXXI, 1921,

ment in the South African capital market, the Bank's constitution strictly followed accepted precepts. But in contrast to the central banks subsequently established in other Dominions, they were precepts with an American stamp. From the following brief description it will be clear to anyone familiar with the Federal Reserve Banks, established eight years earlier in the United States, that the Reserve Bank of South Africa bore a family resemblance to them in matters concerning the directorate, the penalty for suspension of the regulations governing gold reserves, and the relationships between the central and commercial banks. Regarding other matters "a careful comparison of the text . . . will show greater resemblances to the statutes and provisions of the Netherlands Bank and the Java Bank."²⁰

*Original Constitution.*²¹ The ownership of shares in the Bank was partly vested in the commercial banks and partly open to public subscription. Until a certain surplus had been built up, dividends were limited to 6 per cent. After that they might be raised to 10 per cent; and, after further additions to surplus, the remaining profit was assigned to the Government. The board of directors consisted of eleven members with overlapping terms. The Governor, Deputy Governor, and three directors were appointed by the Government; three other directors by the banks; and a further three, to represent commercial, agricultural, and financial interests, were elected by the

pp. 172-8); also Arndt and Richards, "Banking System of South Africa"; also Edwin Cannan, "South African Currency" (*Economic Journal*, vol. XXX, Dec., 1920, pp. 519-30); also C. S. Richards, "The Kemmerer-Vissering Report and the Position of the Reserve Bank of the Union of South Africa" (*Economic Journal*, vol. XXXV, Dec., 1925, pp. 558-67); also reports of the Annual Meetings of the Reserve Bank.

²⁰Arndt and Richards, "Banking System of South Africa," p. 989. The way in which the Reserve Bank Bill took shape was described by the Under-secretary for Finance as follows: "To a very large extent the provisions of the Union Act were taken from reports issued by the Bank of Java. I drafted the Bill with one of the Java Bank's publications and the reports of the American National Monetary Commission beside me. Sir Henry Strakosch revised my drafts with Professor Kemmerer's *A.B.C. of the Federal Reserve System* borrowed from Mr. Samuel Evans beside him. In the course of revision the draft got to resemble the Federal Reserve Act more closely . . ." (*Evidence before the (Kemmerer-Vissering) Commission on the Resumption of Gold Payments by the Union of South Africa*, U. G. no. 13, '25, qq. 4384-5).

²¹Chap. II of the Currency and Banking Act, no. 31 of 1920.

private shareholders. It should be noticed that the Bank was privately owned and that the government-appointed directors were in a minority. These were the ways in which the Bank, in accepted tradition, was to be safeguarded from political influences.

The regulations concerning what the Bank might do were orthodox. They ensured that it should invest its funds only in highly liquid, short term assets. The preceding part of this chapter indicated that these were almost unavailable in South Africa. The most liberal clause, which certainly cannot be accused of licence, was that permitting the Bank to invest an amount equal to the value of its paid-up capital and reserves in Union or other government securities with less than two years to run. The remainder of its powers were scarcely understated by its Governor who said, four years after its establishment, "If you look at the Reserve Bank . . . , you will find it extremely limited in what it may do. Really, the only thing it can do is to discount bills."²²

The Reserve Bank was given a monopoly of note issue, and the circulation was subject to rigid restrictions. A minimum gold reserve of 40 per cent was required, and any issue not backed by gold had to be backed by commercial paper or trade bills. The Bank was required to pay a fine to the Treasury if these gold reserves, and minimum gold and silver reserves of 40 per cent against deposits, were not maintained.

The Bank was required to publish the rates at which it would discount bills. The commercial banks were required to keep on deposit with it an amount equal to 13 per cent of their demand liabilities and 3 per cent of their time liabilities (exclusive of their note issues which were shortly retired).

It is scarcely too much to say that the Reserve Bank was originally clad, not with powers, but with a strait jacket of accepted tradition. In the case of South Africa, however, this was understandable; and more reasonable than in the case of those Dominions which adopted somewhat similar legislation at a later date. Sir Henry (at that time Mr.) Strakosch was largely responsible for the form as well as the fact of the Bank. He, and not he alone, had been impressed by the unfortunate accompaniments of War-time and post-War inflationary finance. Soon after preparing the Reserve Bank Bill he went, in the autumn of 1920, to participate

²²Ibid., qq. 3217-25.

as a South African representative in the International Financial Conference at Brussels. There, as elsewhere, economists and financiers were chiefly concerned with the spread of inflation. This appeared to be the result of the unsound policies being pursued by the politicians. Resolutions were therefore passed favouring the establishment, in countries where they did not exist, of central banks free from political pressure.²³ It is against this background that the constitution of the Reserve Bank ought to be judged.

Moreover, South Africa was the first of the Dominions to experiment with a central bank. It is doubtful whether the Federal Reserve Banks or even the Netherlands and Java Banks were the best of models. The main object of the Federal Reserve System was to strengthen and co-ordinate the activities of some thirty thousand banks; and in South Africa there were only five or six, among which two greatly predominated. But here again, one must keep in mind that relatively little was known and less was written at that time about central banking in a modern sense; and the Federal Reserve System did represent the product of the most intense labour and the most exhaustive research that had ever been devoted to the subject, i.e. the work of the National Monetary Commission.

Whatever may have been the cause of the establishment of a bank which in its original form was inappropriate and ineffective, and whatever may be said in explanation, it was inevitable that changes would have to be made. It is perhaps remarkable, at any rate in view of comparable experience in New Zealand and Canada, how little change has occurred in the South African Bank. Nevertheless its authorities have tried with some measure of success to free themselves from encumbrances and to acquire more power, partly by persuading the Government to use the Bank's facilities to the full, partly by instigating changes in its constitution, partly by attempting to establish a bill market, and partly by departing some way from accepted central banking practice. Let us consider these four lines of liberation.

Government Account. It was some years before the Government employed the Reserve Bank as its banker. In its earliest years the Bank was hardly equipped for the task. Evidence before the Kemmerer-Vissering Commission at the beginning of 1925 disclosed

²³League of Nations Publication; *The International Financial Conference (Brussels, 1920)*, Resolutions on pp. 18 and 20.

that the Government was still using the commercial banks as its depository,²⁴ partly because these banks could offer it interest which the Reserve Bank was forbidden to do by its constitution. The Report of the Commission recommended that the Government account be gradually transferred;²⁵ and this was done about two years later.

Constitutional Changes. These changes have progressively, though perhaps not entirely, removed the difficulties under which the Reserve Bank originally laboured. The first embarrassment of which it was relieved was the presence of three commercial bankers on the directorate.²⁶ Their place was taken in 1923 by three more directors, making a total of six, elected by the private shareholders. In his annual speech of that year the Governor said: "The chief reason for recommending this alteration was that the Reserve Bank's business is almost entirely with the other banks . . . and it was found by the great majority of the Board that it was very difficult to discuss the business of the Bank in the presence of customers who were moreover between themselves competitors. It was also felt strongly that the Reserve Bank would occupy a better position vis-à-vis the public, and command more confidence in its decisions, if it stood on its own basis independent of the other banks."²⁷ The freedom and relief gained by the central bank was all the greater because the commercial banks were still unfriendly to it. None of the boards of the other three Empire central banks was ever embarrassed by the inclusion of commercial bankers.

The Act which relieved this situation also relaxed for five years the provisions regarding note issue. A substantial amount of the securities held, as backing for notes over and above gold reserves, might, during the period, be in the form of Union or British Government treasury bills. In this regard there was some heart-searching, for the Governor, like most bankers and economists at the time, believed that the issue of notes should be dependent upon self-liquidating trade bills, i.e. upon trade itself at one remove. But expediency triumphed over orthodoxy. And the lapse was only to

²⁴*Evidence before the (Kemmerer-Vissering) Commission*, qq. 3158-71.

²⁵Report submitted by E. W. Kemmerer and G. Vissering on the *Resumption of Gold Payments by the Union of South Africa*, U. G. no. 12, '25, p. xxix.

²⁶Currency and Banking Amendment Act, no. 22 of 1923.

²⁷*Report of the General Meeting*, 1925, pp. 7-8.

last for five years: by that time the Governor hoped to have built up a commercial bill market.²⁸

The same Act further facilitated the easing of credit conditions by reducing the reserves which the commercial banks had to hold with the Reserve Bank from 13 per cent to 10 per cent of their own demand liabilities.

The Kemmerer-Vissering Commission included in its Report (1925) some recommendations for the extension of the Reserve Bank's powers. The Government, however, took no immediate action. No doubt they feared difficulties from the Labour group upon the support of which they depended and which was advocating nationalization of the banking system. An amending Act was passed, however, in 1930.²⁹ The most important clauses in this Act both relaxed those restrictions which allowed the Reserve Bank to lend against none but short term collateral and also permitted the Bank to invest its capital and surplus in Union Government securities of *any* currency, the two year limit being abolished. This considerably enhanced the Bank's power to give financial assistance; and the results are evident in a comparison of the credit which the Bank was able to create to meet the stringency of 1931-2 with what it had been able to do in 1929. The difficulties encountered in supporting the commercial banks in the earlier period were influential in persuading the Government to enact the change. Moreover, the Bank's new power to deal to some extent in long term securities brought it into closer touch with the other financial concerns, such as the insurance companies, trust executors, and so forth.

The Union's abandonment of the gold standard was made the occasion for further changes.³⁰ The requirements regarding gold reserves were reduced by one-quarter. The Bank was empowered to buy and sell foreign currencies for the purpose of preventing

²⁸*Ibid.*, pp. 4-7; also see Arndt, *Banking and Currency Development in South Africa*, p. 440. The provision did actually lapse, as intended, in 1928 (*de Kock, Functions and Operations of Central Banks*, p. 41).

²⁹Currency and Banking (Further Amendment) Act, no. 26 of 1930.

³⁰The Legal Tender, Currency, Exchanges and Banking Act, no. 9, 1933. Mention might also be made of an Act (no. 48, 1931), consequent upon England's departure from the gold standard, giving the South African Government emergency powers over currency, banking, and exchanges. Much of the earlier Act was reproduced, for periods of emergency, in the later.

undue fluctuations in the South African pound; and the Government undertook to reimburse it for any loss incurred in these operations.

Encouragement of a Bill Market. Until 1930 the rigorous limitation of the business which the Bank might conduct made it imperative that all possible steps should be taken to encourage the establishment of a bill market. Only in such an environment could it initiate any appreciable influence within the credit structure of the country. In the early nineteen-twenties a market for commercial bills was regarded generally, and especially in London, as the natural habitat of a central bank; and the tradition and experience of the Bank of England, from which the first Governor of the Reserve Bank came, related to the regulation of such a market.

The objective, therefore, seemed wholly desirable. Nor was there, at that time, any strong deterrent, any example of failure in a similar enterprise. The unsuccessful American attempt to establish a self-sustaining market in "acceptances" (as they are called in New York) had yet to be undertaken. In London, even, there was little appreciation of the greatest change which the War had wrought upon the money market, viz. the decline of the commercial bill and the rise of the treasury bill. The dominance of the latter was thought in 1920 and 1921 to be abnormal, a passing product of war finance. For these reasons the attempt to establish a market in commercial bills in South Africa was natural enough.

None the less it was almost completely unsuccessful. The campaign began immediately the Bank was established. A section of the annual speech of 1923 was devoted to extolling the benefits, to bankers and customers alike, of changing from overdrafts to bills. The same theme recurred the next year.³¹ In 1925, pecuniary advantages were offered in the form of a discount rate $1\frac{1}{4}$ per cent below the going rate on overdrafts; and the disappointing result of this offer was that "we have had during two months, I think, a couple of bills."³² In 1926 things were little better: "I believe that the habit of using bills instead of the open account is slowly growing, but 'Oh! how slowly dawns the light!'"³³ In 1929, despite the fact that a large number of export bills were being rediscounted at the Bank, there was still no sign of a real market in bills, local or export.

³¹Reports of the General Meetings, 1923, pp. 10-11, and 1924, p. 2.

³²Evidence before the (Kemmerer-Vissering) Commission, qq. 3248-9 and 3186.

³³Report of the General Meeting, 1926, p. 4.

What was apparent had to be accepted. "There is no bill market. Discount brokers, bill brokers, underwriters, *et id genus omne*, are not among the fauna of this country."³⁴

Experience regarding Union treasury bills has been rather more satisfactory.³⁵ It has never been possible to establish a market in which these bills are traded; they are usually held by the original purchasers until maturity. On the other hand it was possible to persuade the Union Government to issue them. The commercial banks, unsympathetic to the project and fearing a loss of deposits, initially impeded the issue by raising their deposit rates.³⁶ However, the first bills were successfully sold in 1927. Originally, as a special temptation to purchasers, the Reserve Bank offered to rediscount the bills, at any time more than two weeks after issue, at a rate 1/8 per cent above the issue rate. After a year, however, this offer was discontinued; and the Bank fixed from time to time a rate at which it would rediscount. Originally three-month bills only were offered. More recently six- and twelve-month bills have been sold. The rate has never been determined by the system of competitive tenders: it has always been announced, with each offer, by the Treasury.

Two Departures from Accepted Practice. In 1925 the Reserve Bank decided to open branches and do a certain amount of ordinary business in competition with the commercial banks. This was an experiment which seemed to run counter to English experience. In the latter part of the nineteenth century and the early part of the twentieth the Bank of England had been withdrawing from the commercial connections which it had acquired in days when it was primarily a commercial bank. With the increase of public responsibilities clashes became inevitable between obligations to clients and duties to the public; and these were particularly embarrassing when general policies of credit restriction made it undesirable to extend accommodation to customers of long standing. Thus English

³⁴W. H. Clegg (Governor of the Reserve Bank), *Banking in South Africa*, an Address before the British Association (Johannesburg, Aug., 1929), p. 12. M. H. de Kock, now Deputy Governor of the Bank, gave a similarly discouraging account of the attempt to establish a commercial bill market (*Functions and Operations of Central Banks*, pp. 40-5).

³⁵See the account given by de Kock, *ibid.*, especially pp. 42 and 59.

³⁶A. Plant, "The Future of Central Banking in South Africa" (*The Banker*, London, vol. V, no. 28, March, 1928, pp. 384-92).

experience was an argument, which has been used in more than one of the Dominions, for the complete separation of commercial banking business from central banking. But South African experience indicated that the Reserve Bank would never establish control over rates and the volume of credit unless it went a little way into the commercial banking business itself. The step was encouraged by the Kemmerer-Vissering Commission; although the Governor stated that his board had determined upon it before the Report appeared.³⁷

The means by which competition was undertaken was the establishment of five branches at the main ports and cities in the Union. These branches were to accept ordinary current accounts from customers, and to discount bills for them. By this means the Governor hoped to build up "such a modicum of sound business as will make our bank rate effective."³⁸

The commercial banks, and especially one of the leading ones, were not unnaturally annoyed. They objected particularly to the idea that their own reserves, which by law they had to keep on deposit with the Reserve Bank, were being used in competition against them.³⁹ The Governor did his best to explain the objectives and the very modest extent of the competition. No overdrafts, the normal form of accommodation, would be granted: in this way the Bank hoped to avoid embarrassing obligations to regular customers. It was only to be "a sort of competition. That is to say, a competition which has another object than the mere making of money."⁴⁰ After some years the commercial banks ceased to complain, for the volume of business taken from them was very small. The Reserve Bank, on the other hand, was in a position to influence the prevailing rate of discount upon export bills. But it is doubtful whether this was an instrument which gave it much control over the general interest rate structure of the Union, because of the undeveloped and unresponsive state of the local capital market.

The second departure from accepted practice was the monopoly

³⁷*Report of the General Meeting, 1925*, p. 10.

³⁸*Ibid.*, p. 15.

³⁹de Kock, *Functions and Operations of Central Banks*, p. 46; also Plant, *Future of Central Banking in South Africa*. The suggestion that a central bank uses the commercial banks' reserves in competition against them is usually fallacious. See below, p. 180.

⁴⁰*Report of the General Meeting, 1927*, p. 10. See also *Reports of General Meetings, 1925*, pp. 9-15 and *1926*, pp. 9-10.

(or, strictly, the monopsony) of the purchase of South Africa's gold production. Like the constitutions of most central banks, that of the Reserve Bank permitted it to deal in gold; but the arrangements reached were out of the ordinary—certainly not those of familiar gold standard theory which simply requires a willingness to buy and sell gold at fixed, published prices. In 1925 a voluntary arrangement was reached between the Bank and the mines. The Bank's object was to secure control of the foreign exchange rate. The Governor made it clear, however, that the Bank did not intend to monopolize the exchange market.⁴¹ By purchasing the gold from the mines and re-selling it in London, the Bank acquired large supplies of sterling. Indeed its position was completely changed from being one of the largest buyers of sterling (on behalf of the Union Government to service its debts) into far the largest seller of sterling. Its strategic position in the exchange market thus seemed a great deal stronger. In a sense this was true, and in another it was not. If the Bank could have been assured that the mines would, in the absence of the agreement, have gone on selling their gold, and selling the sterling obtained from it, regularly month by month, then the position of the Reserve Bank was in no way improved by the agreement: for it could have put itself in just the same position by instructing some officer or agent to buy up at current prices all the sterling funds offered by the mines. But in so far as there was no assurance that the mines would sell currently produced gold the Reserve Bank's position was strengthened. If, at a time when the mines foresaw a depreciation of the South African pound and a higher price of gold, they had been entirely free to withhold both their sales of gold and the accompanying sales of sterling which covered more than two-thirds of the country's exports, they would have been in a position to force the depreciation which they foresaw. Under such conditions exchange policy would have lain in the hands of the Chamber of Mines rather than in those of the Reserve Bank. Of course the Chamber of Mines was and is free to terminate the arrangement; but an explicit agreement is an explicit agreement, and lends inertia to the existing state of affairs. A new agreement was reached in 1933 when the value of gold began to fluctuate in terms of South African currency. The Reserve Bank pays the mines the current price in London on the day the gold is delivered, less a

⁴¹*Report of the General Meeting, 1925, p. 15.*

commission; and ships to London whatever part of its purchases and existing supplies seem to be required in view of current demands for sterling and in view of its own financial position. Its behaviour in this regard may be judged from a study of Table VII in the appendix. The Bank of England acts as its agent in selling gold in London.

(4) CONCLUSION

This chapter shows that the Reserve Bank of South Africa, even after eighteen years of change, still conforms quite closely to the accepted pattern of a central bank. The majority of its directors are elected by private shareholders. Since 1930 some of its transactions may be in long term securities, but for the most part its constitution still confines it to liquid short term securities and particularly to commercial bills. It is required to publish a "bank rate" and specified metallic reserves are required against its note and deposit liabilities. It has departed from accepted practices in its attempt to build up a modicum of commercial business by means of which to make its discount rate effective; but it is doubtful whether this influence, even if effective, has much impact upon the South African capital market or the economy in general. More serviceable, in view of the enormous gold production of the Union, is the monopoly which the Bank has secured upon the purchase of the output. Had this agreement not been achieved the exchange policy of the Union would in emergencies have lain in the hands of the Chamber of Mines rather than in those of the central bank. Significantly enough, there is no special provision for this agreement in the Bank's constitution; and apart from it and the small commercial business the Bank remains true to accepted practice and precept.

In the Introduction it was pointed out that accepted central banking operations were likely to be effective only in a well-developed market; and the earlier part of this chapter indicated that the South African capital market, at least that section of it which was susceptible to influence by a central bank, was anything but well developed. These considerations suggest that the Reserve Bank cannot have much control over the local situation. Of this much we may feel fairly sure; that if the Bank is effective in its environment it is in spite rather than because of its constitutional heredity.

A cursory survey of the history of the Bank indicates that it is better able to give support to the weak than leadership to the strong, to ease credit in a stringency (at least since 1930) than to restrain credit in a boom. In its early years its most important service was rendered to one of the commercial banks which, in the depression following 1920, fell upon evil days. The National Bank, then one of the two big banks, obtained support in its difficulties from the Reserve Bank, which, in its turn, obtained support from the Union Government and the Bank of England.⁴² It may be that a severe shock to the financial structure of the Union was thereby avoided. That was in 1923. In 1926 the National Bank, the only big bank with its head office in the Union, was taken over and merged into Barclay's (D.C. and O.). Its greatly increased strength naturally diminished its dependence upon the Reserve Bank. In the period of financial stringency leading up to 1929 the Reserve Bank was able to do a little to relieve the situation; but its constitutional restrictions hampered it. It was in a stronger position in the period 1931-2. That it failed, at the end of that time, in maintaining the Government's gold standard policy can hardly be attributed to the inefficiency of its machinery; for no central bank, short of completely blocking the exchange market, can maintain an exchange position in itself difficult to defend and aggravated by adverse psychological and political developments. It was rather in the period following 1932 that the Reserve Bank found itself out of touch with, and beyond influencing, current developments. The raised price of gold exports resulted in an immense accumulation of funds in London on the part of the Reserve Bank and the commercial banks; and the Reserve Bank, in addition, substantially increased its gold reserves. It had no means of reducing the external liquid resources of the commercial banks, and they were able to augment their internal reserves if necessary by selling exchange to the central bank. The raised price of gold produced an internal boom, and a great demand for credit of all sorts. In their response to this demand the commercial banks, well equipped with internal and external reserves, were in a position to be guided chiefly by their own discretion and very little by the operations of the Reserve Bank.

Nevertheless the Reserve Bank is not as impotent as an examination of its formal powers might suggest. Perhaps because it has not

⁴²Arndt and Richards, *Banking System of South Africa*, p. 1006.

commission; and ships to London whatever part of its purchases and existing supplies seem to be required in view of current demands for sterling and in view of its own financial position. Its behaviour in this regard may be judged from a study of Table VII in the appendix. The Bank of England acts as its agent in selling gold in London.

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Nevertheless the Reserve Bank is not as impotent as an examination of its formal powers might suggest. Perhaps because it has not

⁴²Arndt and Richards, *Banking System of South Africa*, p. 1006.

exercised coercion, perhaps because its policies have generally been conservative, its persuasive influence over the local financial community and in government circles has become considerable. This has been especially so in the nineteen-thirties, after the commercial bankers who most vigorously opposed its establishment had passed from the centre of the stage. Its position and its responsibilities regarding monetary and banking matters have become recognized; indeed it is said that the commercial banks would do nothing of importance without consulting the Reserve Bank, even if the matter was quite beyond the financial control of the central institution.

Another conclusion which can be drawn from this chapter is that the establishment of a market in bills, particularly in commercial bills, is no easy matter in a country like South Africa. There must have been few expedients left untried by the Reserve Bank during the years 1921 to 1929; but neither persuasion nor a moderate margin of profit proved adequate to the task. By 1929 it should have been known, indeed it was common knowledge,⁴³ that this attempt to build up a bill market had been unsuccessful. Yet, as we shall see, the same task was spoken of in a very light-hearted fashion in conjunction with the subsequent foundation of other central banks.

A history of the Reserve Bank of South Africa must be chiefly concerned with the gradual extension of its powers. Narrowly confined at first, its freedom has broadened, not only from precedent to precedent, but from one constitutional amendment to another. This development is in contrast with that of the Commonwealth Bank of Australia. In the next chapter we shall discover a persistent trend towards accepted precept in the law and custom of an institution which is now a central bank but which was originally established by the state as a competitive commercial concern.

⁴³E.g., *Manchester Guardian Commercial*, July 28, 1927: "So far the bank . . . has failed to fulfil the expectations of its authors. This is primarily because there is no bill market." And again the *Statist*, Nov. 9, 1929, found the Bank "still somewhat hampered by the relatively small progress that is being made in popularizing the bill of exchange." And again A. S. J. Baster, *The Imperial Banks* (London, 1929), p. 206: "As there is no short money market of any size in South Africa, its [the Bank's] rediscount rate . . . is not of much use, and will depend for its effectiveness on the popularity achieved by the commercial bill in South Africa in the future."

CHAPTER II

THE CAPITAL MARKET AND THE COMMONWEALTH BANK OF AUSTRALIA

THE economic history of Australia has several features of special interest. It was on the back of the merino sheep that the sub-continent was carried from the obscurity of a remote colony and penal settlement into a place of importance in the world economy. Gold discoveries in the middle of the nineteenth century gave impetus and a special turn to developments; but throughout its history, even up to the nineteen-thirties, wool has remained the dominant commodity in the country's economic system.

Wool raising, especially as it is carried on in the sparsely watered spaces of Australia, differs from many agricultural and pastoral pursuits in that it requires, on the one hand, large areas and thus a large capital investment, and, on the other hand, the skilled labour of shearers at a certain season of the year. The season differs in different latitudes. Thus a class structure developed in rural Australia, with employers owning the land and with organized, unionized employees moving about the country with the shearing season. In countries where rural industries consist in family farms of small extent the rural population is often conservative; but in Australia labour parties and socialist principles found strong support in the country as well as in the towns. Industrialism and urbanization gained support from labour groups who believed that their standards of living were best preserved against foreign competition by restrictions on the import of people and commodities—commodities from countries where costs of production were low on account of highly capitalistic, large-scale production, and both people and commodities from countries where wages were low.

Thus Australia is characterized by a relatively high degree of urban concentration, growing industrialization, and a large measure of state intervention and social control. And behind it all, in the arid hinterland, still grazes the merino sheep. All these features are reflected in the financial institutions and the capital market; whe-

ther it be in the stock and station agents financing the pastoral industry, or in the wide range of protected industries whose shares are quoted on the stock market, or, most important for present purposes, in the peculiar heredity and environment of the Commonwealth Bank of Australia.

(1) FINANCIAL INSTITUTIONS¹

Commercial Banks. In Australia there are nine commercial banks, commonly known as the trading banks.² In 1936 they operated 2,352 branches and 717 other agencies. Like the banks elsewhere in the Dominions, they carry on a general banking business, supplying a variety of financial services: discounts, collections, foreign exchange, the management of current accounts, the receipt of fixed deposits, and the extension of many types of credit. Advances generally take the form of overdrafts, repayable on demand, with interest charged on daily balances; but, for all that, the banks supply the pastoral and agricultural community with a substantial amount of long term accommodation. "Our advances to primary producers, in effect, in the main are long term loans . . .," said one of the leading bankers. "There we have to meet the competition of private lenders and others . . . such as trustee companies, pastoral companies, and the like . . . [we] would readily lend to a farmer to purchase freehold."³ Apart from these loans to primary producers, however, the banks try to limit their advances to the short term requirements of their customers. At times they may provide funds for fixed equipment; but in the expectation that, as the borrowing concern prospers and grows, it will have recourse to the proper source of long term funds—the stock market. In 1936 the advances of the trading banks which amounted to some £A 260 millions were distributed as shown in an accompanying table.

¹See the *Report of the Royal Commission appointed to Inquire into the Monetary and Banking Systems at Present in Operation in Australia, etc.* (Canberra, 1937); also D. B. Copland, "The Banking System of Australia" (*Foreign Banking Systems*, edited by H. Parker Willis and B. H. Beckhart, New York, 1929).

²The Bank of New Zealand, operating two branches in Australia, is sometimes included. The number is then increased to ten.

³Evidence given before the Royal Commission on Monetary and Banking Systems, 1937, by L. J. McConnan, Chief Manager of the National Bank of Australasia.

**DISTRIBUTION OF THE ADVANCES OF NINE AUSTRALIAN
TRADING BANKS, 1936***

	Per cent
Manufacturing and mining.....	9.2
Commerce, transport, and distribution.....	19.0
Finance, insurance, etc.....	5.9
Agricultural and pastoral industries.....	47.7
Professions, entertainments, and personal service.....	5.0
Others: including advances for building and to public bodies.....	13.2
	<hr/>
	100.0

**Report of the Royal Commission on Monetary and Banking Systems*, p. 314.

Another table indicates the nature of the banks' chief assets and liabilities.

**CHIEF ASSETS AND LIABILITIES WITHIN AUSTRALIA AND FUNDS IN LONDON
OF NINE AUSTRALIAN TRADING BANKS, DECEMBER, 1936***

	£A 000,000
<i>Assets</i>	
Cash (bullion, coin, notes, and deposits with the central bank).....	32
Australian treasury bills.....	22
London funds.....	27
Australian government securities	14
All other securities (those of municipal and public bodies almost entirely).....	1
Bills discounted.....	3
Advances.....	258

Liabilities

Deposits bearing interest:	
Government.....	4
Other.....	178
<i>Deposits not bearing interest:</i>	
Government.....	1
Other.....	112

**Report on the Royal Commission on Monetary and Banking Systems*, pp. 302
et seq.

The total assets of the nine trading banks amounted, in 1936, to about £A 416 millions and were spread fairly evenly amongst them. Six of the banks controlled assets between £A 33 and £A 61 millions. Of the remaining three, two were relatively small and the third, the Bank of New South Wales, was the largest of all. Its assets amounted to £A 112 millions.

The banks generally act in concert in a number of matters. These include changes in interest rates on deposits, charges for services, the provision of clearing houses, and other affairs of general concern. The Associated Banks of Victoria is an organization, informal in that it lacks constitution or articles of association, which meets monthly for the discussion of matters of common interest. Its membership includes the five banks with head offices or chief Australian offices in Melbourne. Two banks with head offices in Sydney are members in respect of their business in Victoria. There might be an even greater measure of co-operation and collaboration amongst the Australian banks were it not that three of them, with head offices in England, incline to be aloof.

In addition to the nine large trading banks there are four others which conduct some of the same business on a smaller scale: the Ballarat Banking Company; the Bank of New Zealand, with branches in Sydney and Melbourne; the Comptoir National d'Escompte de Paris, also with two branches; and the Yokohama Specie Bank, with one. Australian bankers, like others in the Dominions, look unfavourably upon foreign intruders, particularly because they are likely to skim off some of the most profitable business without assuming any responsibility for the general financial well-being of the country. "About thirteen years ago the American Express Company, which is a recognized American banking concern, endeavoured to establish itself in Australia, and opened an office in Sydney, but pressure was brought to bear so that that office was closed. . . . I could not say by whom that pressure was brought to bear, but the position was made intolerable, and the office only remained open a few months. . . . [In preventing the establishment of a new bank] we may have to seek government assistance. We could, of course, refuse such a bank clearing facilities."⁴

Insurance Companies. There were, in the year 1937, some twenty-seven companies and societies doing life insurance business in Australia. These firms controlled assets in Australasia amounting to about £A 263 millions. Of this sum about 54 per cent was in the form of government and municipal securities, 21 per cent in mortgages, and perhaps 10 per cent in policy loans. In each of the past ten years the insurance companies have had between £A 5 and £A 10 millions of new money seeking investment; and recently there

⁴L. J. McConnan, *ibid.*

has been a tendency to take up bonds and debentures rather than mortgages, because real property has been unstable and uncertain in value, because moratorium legislation has interfered with collections on mortgages, and perhaps chiefly because the demand for mortgage money has not been great. As for the debentures, many of those held by the insurance companies (and this is true in small degree of the trading banks) are not marketable. They have been issued by various municipal authorities, such as country shires, and taken up as non-marketable investments by the financial institutions. The insurance companies have come to occupy an important position as underwriters and sub-underwriters of debenture issues of all sorts, including those of the Commonwealth Government.

Six of the biggest insurance concerns, doing most of the business, are conducted on a mutual basis. These and other Australian companies do a good deal of business in New Zealand, South Africa, and the United Kingdom. Four companies doing business in Australia have their head offices overseas, but their Australian business is not large.

Trustee Companies and Pastoral Finance Companies. In 1936 trustee companies controlled Australian assets exceeding £A 220 millions. Of this sum, the funds of the companies themselves amounted to little more than one per cent, the remainder being monies managed in trust. Twenty-nine per cent was invested in government and municipal securities, 17 per cent in mortgage and other loans, rather more than half the mortgages being in urban districts, 23 per cent in real property, and the remaining 31 per cent in other assets, including shares in other companies. Like the insurance companies, and for the same reasons, the trustee companies have invested increasingly in government securities rather than mortgages.

Another important form of private enterprise engaging in financial business is the pastoral finance company. There are about twenty important firms of this type in Australia. They do business of a sort that is not uncommon in areas which are largely dependent upon large-scale agriculture: partly that of a general merchant, partly commercial, and partly financial. They have developed to an exceptional size and strength in connection with the sheep stations and other industries of Australia and New Zealand, where they are known as stock and station agents. Most of them act as

agents for buying and selling livestock and also for buying and selling land. They handle, store, and display wool; and also skins, hides, tallow, etc. But not only do they dispose of their clients' produce; they provide them with a wide range of stores and merchandise. Much of this is supplied on credit. It is not the custom of these companies to grant long term accommodation; but as in the case of the banks, many of their loans ostensibly repayable on demand are expected to remain outstanding for long periods. Again, like the banks, they charge interest on the daily average overdraft. In 1936 the amount of their loans outstanding was rather more than £A 25 millions.

The chief source from which these companies finance their various operations is the issue of shares (£A 16 millions outstanding in 1936). They also issue debentures (£A 11 millions) and use their reserves and undistributed profits (£A 9 millions). They will receive moneys on deposit from their own clients (£A 4 millions) and pay them interest. And at times when their seasonal needs are greatest they may borrow from the trading banks.

Land and Agricultural Banks. Each of the Australian states has established some form of land or agricultural bank. In some cases these are practically government departments. They mainly provide long term loans to home builders and more especially to primary producers in the early stages of land development. Space does not permit description of the various schemes established in the several states; suffice it to say that they have been of considerable importance. Not only have there been regular measures for the supply of agricultural credit, but also special measures to provide advances to new settlers. Much money has been lent, partly as a result of political pressure, in pioneer districts in which private capital might have feared to tread; and much has been lost. Funds have been obtained by the government agencies as direct grants from the Governments and by the issue of debentures guaranteed by the Governments. The Commonwealth Government has, amongst other measures, established a Rural Credits Department of the central bank. It is described in section (3) of this chapter.

This outline of various sources of rural credit must not leave the impression that they are the most important in the country. The sources (exclusive of private credit which can hardly be estimated) would probably rank as follows: (1) the trading banks; (2) the

pastoral finance companies; (3) the savings banks—some of which remain to be described below; (4) the government rural credit banks; and (5) the insurance companies.

Savings Banks. Facilities for the collection of small savings have largely been supplied by the various Australian Governments. Most of the state savings banks have, by now, been absorbed into the Commonwealth Savings Bank. This Bank operates in all the States. In South Australia and Victoria there are also savings banks operating under the aegis of the state Governments; and in Tasmania there are two trustee savings banks. In these three states the Commonwealth Bank probably does less than half the business.

In 1936 the resources of the Commonwealth Savings Bank amounted to some £A 142 millions. Of this about 63 per cent was invested in government securities and 23 per cent in the securities of municipalities and other public bodies. Slightly more than 10 per cent was held in the form of coin, notes, cash balances, and money at short call.

In 1936 the resources of the State Savings Bank of Victoria amounted to some £A 70 millions: and those of the Trustee Savings Bank guaranteed by South Australia were some £A 25 millions. These were allocated into the following channels: cash on hand and on call or fixed deposit with other banks (29 per cent and 24 per cent respectively); government securities (43 per cent and 50 per cent); securities of public bodies (6 per cent and 2 per cent); mortgage loans (21 per cent, including funds directed through the Credit Foncier Department, and 23 per cent). It may be noticed that the cash reserve proportion maintained by the Commonwealth Savings Bank is only about half that of the other two. This is explained by its affiliation with the Commonwealth Bank. It is of some importance, from the point of view of central banking operations, that the largest savings bank is controlled by the board of the central bank and keeps its reserves on deposit there, while the other savings banks keep their reserves in the commercial banks.

Building Societies. An appreciable amount of mortgage money has been made available through building societies. In 1935 the outstanding mortgage advances of these societies amounted to nearly £A 11 millions; and in the following years the societies were more active than ever before. The greater part of this sum was obtained by the issue of shares, but some of the societies also re-

ceived deposits, both fixed and on call. The directors of the building societies do not, for the most part, move in the circles of high finance; thus the directorates do not generally interlock with those of the banks, the insurance companies, the trustee companies, pastoral finance companies, and with big business in general.

(2) THE CAPITAL MARKET⁵

Market for Industrial Shares. The traditional British method of securing long term capital for the use of private enterprise is by the formation of joint stock companies and the issue of shares. In Australia, as in South Africa, this method has been the one chiefly employed by private capitalists. An outstanding feature of the Australian market is the great number of relatively small industrial issues. In Australia, government enterprise has either constructed or bought up practically all of the public utilities: railways, tramways, the supply of heat and light, etc. The result is that private enterprise has been chiefly devoted to other purposes which require capital in smaller blocks. Despite ample tariff protection, manufacturing for Australia's seven million inhabitants is conducted in small units; at any rate compared with those in most industrial countries. The investing public in Australia can readily purchase shares in a considerable number, say fifty, financial and commercial concerns including several investment trusts, and also in a large number of manufacturing establishments, perhaps several hundred. If it is the case, as has recently been suggested,⁶ that Australia's development in the near future will be of a type more appropriate to private initiative than in the past, if what will be wanted are factories and shops rather than harbours and roads, then the proportion of funds raised by issues of shares, instead of by public borrowing, may increase, together with the total number of issues available for investment and speculation.

There are nine stock exchanges in Australia. The two most important are the Sydney Exchange, with 98 members in 1937, and the Melbourne Exchange with 129. Other exchanges are operated in Adelaide (71 members), Brisbane (36), Perth (18), and Hobart (12); and less important ones in Launceston (18), Bendigo (27),

⁵See *Report of the Royal Commission on Monetary and Banking Systems*; also Copland, "Banking System of Australia."

⁶W. B. Reddaway, article in the *Sydney Morning Herald* (Nov. 30, 1936).

Ballarat (21), and Rockhampton (21). They deal not only in the stocks of private concerns, but also in bonds and debentures of all sorts. Many members of these exchanges act as dealers on their own behalf as well as brokers on behalf of their clients; holding portfolios of their own from which they trade. Their activities contribute to the breadth of the market. Such funds as they require for this business they obtain mostly from the banks and in part from other large financial institutions with floating balances.

It is not necessary to repeat in this chapter what was said in the last concerning the difficulty which any central bank, and especially one which is bound by accepted rules, will experience in attempting to control stock market operations. In Australia, as in South Africa although in much less degree, the problem would be made the more difficult because a number of the important stocks listed on the exchanges, notably those of the banks, also find a ready market in London. Nevertheless experience in recent years suggests that the Australian market has developed a large measure of financial and psychological independence, at least in so far as this is possible in a country which is still basically dependent upon export markets for sales of important agricultural and mineral products.

A recent development in connection with the Sydney Exchange is worth mentioning; for it may be indicative of the increasing volume of Australian funds which is seeking investment in marketable securities. This is the formation of the Associated Sydney Underwriters. The membership is limited to twenty, all of whom are members of the Sydney Stock Exchange. Amongst the objectives of this association are the following: "To facilitate and encourage the creation, issue or conversion of debentures . . . bonds . . . shares, stocks and securities and to act as trustees in connection with any such securities and to take part in the conversion of business concerns and undertakings into Companies."

Market for Government Stock, Bonds, and Debentures. A great deal of financing has been done in Australia by the issue of these types of securities. This is because so much of the country's development has been undertaken by various governmental authorities; the nature of the country and the temper of the people being, on the whole, even more favourable to government enterprise than in the other Dominions. Private joint stock companies have raised relatively little money in the form of public borrowing, relying rather

upon the issue of share capital. But the Government of the Commonwealth, those of the six states, and more than 1,100 boards and local government authorities have been ready borrowers. These numerous local Governments and semi-governmental authorities have sold securities to financial institutions; but the issues of only about a dozen of them, amounting to perhaps one-quarter of their total public issues, are freely dealt in on the Australian exchanges. Perhaps another quarter of the borrowings of boards and local bodies has been direct from Governments.

The greater part of the activity of the stock exchange, in so far as debentures and government stock are concerned, is in the issues of the Commonwealth and the six states. Since the Financial Agreement of 1927 the seven Governments have consolidated their borrowing under the jurisdiction of the Loan Council. This body consists of representatives of the Commonwealth and the six states, and is the sole authority to issue securities on behalf of their Governments. The merging of seven borrowers into one has naturally reduced the diversity of issues on the market; but investors seem satisfied that what has been lost in variety has been more than gained in regularity and certainty.⁷ The Loan Council has come to occupy a position of influence in Australia both in normal times and also in such financial emergencies as that of 1931. It exists to promote orderly government finance, long and short term, at home and abroad. In the latter nineteen-thirties some of the states, especially New South Wales, dissatisfied with the loans obtainable under the Council, began to set up new semi-governmental authorities and to

⁷In this regard an Australian economist wrote the following: "I don't think the merging of the State securities made much difference in Australia. I am quite certain, however, that it made a great deal of difference to the London market, which loved the variety of securities. Tasmanian, which had no virtue whatever, seeing that Tasmania is chronically hard up, actually had a scarcity value, and stood higher than the securities of some of the more solvent States." Another economist wrote: "It was notorious that Victoria with the soundest financial position, always got worse terms in London than N. S. W. because she was an infrequent borrower."

It must be recalled that one of the original objectives of the British "Colonial Stock Act" was to broaden the opportunities for trustee investment in London. See Sir Hal Colebatch, "Australian Credit as Viewed from London" (*Economic Record*, vol. III, no. 5, Nov., 1927, pp. 217-27).

For the text of the Financial Agreement see the *Official Year Book of the Commonwealth of Australia*, no. 29, 1936 (Canberra), pp. 21 et. seq.

increase the borrowing power of old ones. Opposing interests set a movement on foot to bring the borrowing of semi-governmental authorities, which was growing to be nearly half as large as state government borrowing proper, under the control of the Council. In the middle of 1939 the issue was still undecided.

The distribution of long term government securities in Australia is indicated in the following table.

HOLDINGS OF LONG TERM GOVERNMENT SECURITIES IN AUSTRALIA*
DECEMBER 31, 1936

<i>Holders</i>		Face value of holdings £A 000,000
Commonwealth Bank:		
General banking department.....	27.47	111.30
Savings bank.....	83.83	
Trading banks.....		20.26
Savings banks other than above.....		42.82
Trustee companies (mainly trust funds).....		38.32
Insurance companies.....		61.98
Superannuation funds.....		15.02
Government trust funds and semi-governmental authorities.....		20.26
Friendly societies and trade unions.....		1.40
Other institutions and general public.....		275.71
		<hr/>
		587.07

*From the *Report of the Royal Commission on Monetary and Banking Systems*, p. 16. The figures exclude treasury bills.

The importance of each buyer in a security market, indeed in any market, does not depend by any means entirely upon the amount which he holds or even upon the net amount which he annually purchases. It depends also, and especially when periods as short as a year or two are under consideration, upon the extent to which he operates on the market, actively buying and selling. It is such operators that "make the market" for the others. For this reason the operations of the trading banks are more significant than the above figures suggest. The banks expand and contract their security holdings in response to movements of the other, more active, items in their balance sheets; which, in turn, reflect the seasonal and general movements of business and the operations of the central bank. The insurance companies also sometimes do a sub-

stantial amount of trading on the market and a small measure is done by the savings banks. For the most part, however, all these financial institutions purchase government securities as investments, temporary or permanent, with no eye to possible profits on turnover. The greater part of the issues are immobilized in these or in other institutions and individual holdings. Dealings in securities of all sorts are discouraged by the relatively high brokerage commission of one-half per cent.

The National Debt Commissioners are the largest single body of buyers. They invest, under the Loan Council, monies currently accruing in government sinking funds. They buy only to redeem debt (and never sell); and they do so with no great variation from month to month, apparently without attempting to influence the market by the timing of their purchases. On the other hand they can, and apparently do, make an impression on the market by consciously varying their purchases between the various outstanding issues in Australia and even between Australia and London.

As bonds and debentures approach their maturity they gradually pass from the status of long term into the status of short term securities. It is chiefly in short term securities that central banks are supposed to invest. In Australia maturing issues, originally of long term, are the only marketable short term securities. Their supply is irregular. At times when large maturities are imminent they are plentiful; then a year or two may follow in which they are few.⁸ From the standpoint of the government treasuries, concerned with the issue and redemption of debt, the maturities of Australian issues show considerable regularity; but the regularity is not sufficient to supply to the market a reasonably steady amount of bonds with less than two years' currency.

The foregoing account indicates that there is considerable variety in the securities held in Australia; but that many of them are not marketable. Whether the market in government bonds is sufficiently well developed to support without disorganization the open market operations of the central bank is at present not settled. This much, however, is clear; that the bond market is much broader than

⁸A table of government debt maturities appears in the *Official Year Book*, 1936, p. 909. Cf. also *Minutes of Evidence before the Select Committee of the Senate appointed to Consider and Report upon the Central Reserve Bank Bill* (Canberra, 1930), evidence by A. C. Davidson, p. 6.

that of South Africa described in the last chapter or that of New Zealand to be described in the next. It is sufficiently broad at least for the possibility of open market operations to be a matter of controversy.

Bill Market and Short Term Lending. There is no local market in commercial bills. Nowadays bills discounted only amount to about one per cent of total bank advances. The Commonwealth Bank, in so far as it has attempted to encourage bills as an alternative to overdraft accommodation, has had no more success than the Reserve Bank of South Africa.⁹

By far the greatest part of short term credit transactions in Australia, as in the other Dominions, exists in the form of bank deposits and bank advances. Advances usually take the form of overdraft facilities which customers arrange with the trading banks. Most of the advances are, on paper at least, "call loans"; but even the loans to stock brokers and other financial firms, which in a well-developed money market may be considered to be highly liquid, cannot be so considered in Australia. On the other side of their balance sheets, the banks carry current chequing accounts, for the operation of which certain charges are made; and also accept fixed deposits, chiefly from business and financial houses with temporarily superfluous funds. There is considerable competition for commercial business; but this usually takes the form of offering better services or lower operating charges rather than of undercutting rates of interest.

Rates of interest charged for banking accommodation are adjusted by the individual banks to suit the general state of business and the circumstances and risks surrounding their individual clients. The savings banks and finance companies quote rates for loans, but these rates are of the nature of mortgage rates.

Rates of interest upon fixed deposits in the trading and savings banks are published. The trading banks do not seek the accumulations of small savers, but for larger deposits these two types of institution are competitive between each other as well as amongst themselves.¹⁰ When general movements of rates are afoot there are

⁹A. S. J. Baster, *The Imperial Banks* (London, 1929), p. 168.

¹⁰There is no doubt that the individual institutions are competitive: but the position of the state savings banks as a group vis-à-vis the trading banks as a group is complicated because the former keep their reserves on deposit with some

generally consultations amongst those affected, and changes have usually been the product of mutual agreement. Since 1930 there have been many movements of the rates upon advances and deposits. For the most part, as we have said, the changes in deposit rates have represented mutual agreement and advance rates have been brought into line. But the impression must not be left that agreement has been reached always or easily. "One hears bankers talk of a 'gentlemen's agreement' concerning interest rates, but it is difficult to find any evidence of such an agreement, and it certainly does not appear to be very strictly kept."¹¹ In the early days of the 1929 depression the Commonwealth Bank was not playing the full part of a central bank; and leadership in the field of interest rates was left to individual commercial banks. The General Manager of the Bank of New South Wales has since complained of the difficulty he encountered in persuading the other banks to vary their rates.¹² Nor has the Commonwealth Bank been satisfied with its experience since it has undertaken the leadership.¹³ Indeed its special grievance has been against the Bank of New South Wales, particularly regarding the interest rate policy which the latter felt impelled to undertake in March, 1936, when the central bank was experimenting with a new method in the issue of treasury bills.¹⁴

Treasury bills have played an important role in Australian finance during the nineteen-thirties. This subject is treated at of the latter. The Commonwealth Savings Bank keeps its reserves in the same form as the trading banks—notes and central bank deposits. See the *Royal Commission on Monetary and Banking Systems*, pp. 81-2.

¹¹T. Hytten, Economic Adviser to the Bank of New South Wales, *Replies to Questionnaire*, submitted to the Royal Commission on Monetary and Banking Systems, 1936, published by the Bank of New South Wales, p. 31. He suggests that banking is changing from a profession to a business.

¹²A. C. Davidson, General Manager of the Bank of New South Wales, *Replies to Questionnaire*, pp. 24-5.

¹³Commonwealth Bank of Australia, *Reply to Questionnaire*, submitted to the Royal Commission on Monetary and Banking Systems in Australia by Alex F. Bell, Acting Chairman of Directors, July-Aug., 1936, published by the Commonwealth Bank, p. 3.

¹⁴Statement to the Royal Commission on the Monetary and Banking Systems in Australia by Sir Claude Reading, on Nov. 9, 1936 (multigraphed by the Commonwealth Bank), pp. 5-6. See also account of the session in the *Sydney Morning Herald*, Nov. 10, 1936, p. 11, under the headings, "Bank Rate: Bankers in Conflict: Mr. Davidson's Evidence: Sir Claude Reading's Denial."

length in Chapter XIII. Suffice it to say here that the bills have been the focus of controversy between more conservative and more advanced opinions on monetary policy. They have in a measure replaced London funds among the liquid assets of the banks and have thus decreased the dependence of the local capital market on that centre. In so far as the Commonwealth Bank can influence the Loan Council in regard to the issue of bills it has acquired a new influence over the liquid position of the banks; but it must be added that, up till the present (1939), the Commonwealth Bank's persuasive efforts have not generally been successful in this regard. Amongst the points of difference between the Bank and the Council has been whether to establish a system of issue by competitive tender as the basis for an open market in bills; and so far the Loan Council has prevented it. All bills are taken up by the Commonwealth Bank. Some are then distributed to the trading banks; and since the method of distribution is more or less arbitrary it has become a further point of acrimony.

Foreign Exchange Market. For many years the Australian banks have had agreements regarding their published rates of exchange on London, agreements which have been adjusted occasionally in conformity with general movements of supply and demand.¹⁵ All of the banks hold funds in London, which are allowed to increase and decrease from time to time and which constitute their reserves against seasonal and irregular demands for all foreign currencies—sterling and whatever sterling will buy in the London foreign exchange market. The banks which are most closely associated with the export business of the country usually hold relatively the largest and most variable supplies of London funds.

The banks are the chief dealers in foreign exchange. There have from time to time been independent exchange dealers, and small amounts have been held by Australian importing houses with

¹⁵Roland Wilson, "The Australian Exchange Rate on London, 1893-1931" (*Economic Record*, vol. VI, no. 12, May, 1931, pp. 121-5). Dr. Wilson, using material mostly supplied by Mr. Davidson, says on p. 125 that there was no agreement in force from 1899-1912; but on p. 123 he says that no agreement existed between 1904 and 1906, apparently implying that some agreement *did* exist after 1906. Agreements among the banks regarding exchange and interest rates are recorded in the 1850's and 1860's. See Baster, *The Imperial Banks*, pp. 145-6.

London offices.¹⁶ A few foreign banks do a small business; so do telegraph companies, tourist agencies, and shipping companies; and some of the larger importers and exporters normally form a small outside market between themselves. Nevertheless, the trading banks are to be found on one side or the other of the very great majority of the operations.

The published rates of the banks are not necessarily those at which most business is done. These rates apply chiefly to small or irregular transactions. Most of the regular business is done in between the published buying and selling rates. It is highly competitive, both the banks and their customers being accustomed to "shop around" for the best available prices. Nowadays the published rates are set by the Commonwealth Bank. Each Friday, since December, 1931, the Bank has announced a buying rate of £A 125 and a selling rate of £A 125/10/- for £100 sterling. It is within this spread that competition takes place. No dealings take place beyond the spread; except when some sudden movement of funds or other reason causes the banks to ration the available supplies of exchange so that at the published rate the demand cannot be satisfied. A "black market" then develops.

(3) THE COMMONWEALTH BANK OF AUSTRALIA

*The Bank's Foundation.*¹⁷ It was the "torpedo brigade" that launched the Commonwealth Bank of Australia; the torpedo brigade led by Mr. King O'Malley. They launched it upon a reluctant Labour Government, of which O'Malley was a member; and the Government launched it, somewhat emasculated, upon a Liberal Opposition. In 1910 the Labour party had obtained a majority in both Houses of Parliament; and O'Malley had managed to get "a national bank" into the fighting platform of the party. Later he managed to manoeuvre the Government into acting upon its platform despite the warnings of financiers. And so, in 1911, the Commonwealth Bank Act¹⁸ was passed and became law.

¹⁶Roland Wilson, "London Funds and the Australian Economy" (*Economic Record*, vol. XI, supplement, March, 1935, p. 101). Also Cholmondeley Darvell, General Manager of the Commercial Banking Company of Sydney, *Evidence to the Royal Commission on Monetary and Banking Systems*.

¹⁷L. C. Jauncey, *Australia's Government Bank* (London, 1934), chaps. III and IV.

¹⁸An Act to Provide for a Commonwealth Bank, Commonwealth of Australia, no. 18 of 1911.

Today the Commonwealth Bank is not what it used to be. Nor is it, nor was it ever, what O'Malley and his cohorts intended. He wanted a hybrid bank; a cross between a commercial bank and, as it was understood in those days, a bank of issue and reserve. He wanted to break the monopoly of the trading banks and at the same time introduce a sound and scientific control of the currency, with the profits going to the people. His bank would be "conducted purely as a government department, absolutely free from political control."¹⁹ On its board would be the representatives of the various states and the Commonwealth—the only major concession ever offered to the cause of federalism by a leading proponent of central banking in the Dominions.

But all this was not pleasing to the majority of the Labour Government, nor to its financial advisers. In the end a bank was established the constitution of which implied that it might compete with the commercial banks. Some of the sponsors of the Bank hoped that it would grow to resemble the Bank of England.²⁰ Nevertheless, the power to issue notes was vested, not in the new Bank, but in the federal Treasury, the issues of the other banks being rapidly taxed out of existence. For the rest, the chief peculiarities of the Bank lay in that it did not raise any capital, a temporary loan from the Government supplying its initial needs; and that, with no shareholders or board of directors to restrict him, the Governor assumed exceptionally wide powers. Moreover, unlike the other institutions in the country, it was intended to do both a savings bank and a general business.

The Governor, Mr. (after 1920 Sir) Denison Miller, was a man of considerable force. He had been chief metropolitan inspector and personal assistant to the general manager of the Bank of New South Wales. In its early days the Commonwealth Bank received much helpful co-operation from this, the oldest and largest trading bank, and indeed from the other banks.²¹ This was partly because the Governor never undertook, indeed it is doubtful how far the

¹⁹From the first section of the proposal which O'Malley laid before the conference of the Labour party in Brisbane, 1908. Quoted by Jauncey, *Australia's Government Bank*, p. 49.

²⁰Baster, *The Imperial Banks*, p. 145.

²¹C. C. Faulkner, *The Commonwealth Bank of Australia* (Commonwealth Bank, 1923), pp. 42 and 45; also Jauncey, *Australia's Government Bank*, p. 71.

Government which appointed him desired him to undertake, a trust-busting campaign against the entrenched position of the private banks. And moreover, whatever might have been his policy in more peaceful times, whether he might have followed the explosive policy of the torpedo brigade or whether he might have remoulded his Bank nearer to the Bank of England,²² most of his years, until his sudden death in 1923, were spent in meeting and overcoming the special financial problems produced by the War and its aftermath. The Bank began to operate its savings business in 1912. Not until 1913 did it open its general banking department, which consisted of little but holding the Government's account. Then the War broke out.

With the War, managing the Commonwealth's account became a task of the first magnitude and importance. The new Bank took the lead in matters which required the collaboration of the banks. Further, it financed a number of producers' pools—for wheat, for wool, for fruits, for meat, and for other products. As agent for the Commonwealth Treasury it looked after the flotation of all the War loans issued in Australia and after 1916 of all those issued in London.²³ By the end of the War its position was established as government banker and as an important factor in Australian finance.

The Bank Becomes a Central Bank in Law. The Commonwealth Bank has now most of the legal powers peculiar to a central bank but very few of the restrictions. The powers it acquired almost entirely in the year 1924. The Labour party lost its command of Parliament in 1916. From that time onwards the ambitions of the torpedo brigade receded from political possibility; and through the eyes of their political successors in the left wing of their party the Commonwealth Bank now appears mildewed with discretion. Governments to the right, in a succession only broken in the years 1929-31, have encouraged the authorities of the Bank in their proclivity to keep clear of active competition and to approach, at no unseemly

²²Cf. R. C. Mills and E. R. Walker, *Money* (Sydney, 1935), p. 234.

²³This description is paraphrased from the *Initial Statement* by Sir Claude Reading to the Royal Commission on Monetary and Banking Systems, published by the Commonwealth Bank of Australia, p. 1. A fuller account may be found in Faulkner, *Commonwealth Bank of Australia*, chaps. vi-xii. The only changes in the Bank's constitution during the War were some minor modifications embodied in Act no. 24 of 1914.

speed, the goal of accepted central banking. Nevertheless, the Bank has attracted, through its branches, a considerable amount of commercial business.

In 1920 a step towards central banking was taken.²⁴ The Treasury handed over the note issue to the Bank. Following the fashion set by the Bank of England in 1844, a separate issue department was established. Its task, and one of great moment it appeared in those days of European currency inflations, was not entrusted like the rest of the Bank's business to the almost untrammelled discretion of the Governor; but instead to a Notes Board of which he was a member. Amongst those interested in monetary matters there was controversy whether the Board should (by using its powers to expand or contract currency) keep prices or the exchange rate stable. Actually it did neither. In 1924 there was a heavy demand for Australian funds; they rose to a premium of 3½ per cent and still had to be rationed. The banks complained of a shortage of local currency, but the Board denied its existence. Generally, the situation seemed unsatisfactory. Moreover, Sir Denison Miller died in 1923; so that the time was ripe for a general reorganization of the Bank.

The reorganization came in 1924.²⁵ The Bruce Government, which undertook it, remedied the alleged shortage of notes by making the issue department an integral part of the Bank and allowing the department to issue notes against assets (over and above the 25 per cent gold reserves) held in London. More important, however, in the eyes of the Government were the provisions to transform the Bank into a central bank. In this the Government may well have been influenced by English advice received by its members attending the Imperial Conference in London earlier in the year. In introducing a bill into the House of Representatives the Commonwealth Treasurer stressed the importance of five changes.²⁶ First, a board of directors was appointed by the Government, with long overlapping terms, to control, not only the note issue as in the past, but all the affairs of the Bank. The directors were to be the Governor, the Secretary of the Commonwealth Treasury, and "six other persons who are or have been actively engaged in agriculture, commerce, finance or industry." The bill originally proposed that two

²⁴Act no. 43 of 1920.

²⁵Act no. 15 of 1924.

²⁶Speech by the Hon. Earle Page, June 13, 1924.

directors, with rather special powers, should be appointed "because of their knowledge of currency matters"; but in the Act that unorthodox idea was dropped.²⁷ Second, the Bank was encouraged to strengthen its position by raising some capital. Third, the Bank was, after a date to be fixed by proclamation, to "fix and publish from time to time the rates at which the Bank will discount and rediscount bills of exchange." This, declared the Commonwealth Treasurer, was "one of the most important functions of a central bank." Fourth, the banks were to be required to settle clearing balances by cheques drawn upon, and paid into, the Commonwealth Bank. This provision endorsed the existing practice of the banks, established as a convenience during and after the War, in keeping small amounts at the central bank for the purpose of discharging clearing balances; and it allowed the Treasurer to say that "there is to be no compulsion as to the amount kept . . . with the Commonwealth Bank . . . just as is the case with the Bank of England." The hope was that the banks would deposit practically all their reserves with the central bank. Fifth, the statistics to be compiled and published by the trading banks were to be increased. Another provision of the Act of 1924 was that a board of advice might be set up in London. Thus was the Commonwealth Bank arrayed in the armour of orthodoxy in the year 1924.

It is interesting to record the fate which befell most of these enactments. As for raising capital, the Bank merely transferred to capital account £4 millions from its existing "Reserve and Redemption Funds." It is possible that this change in the balance sheet made it more acceptable in financial circles; but otherwise the situation was unaltered. As for the advisory board in London, it was never established. As for publishing a rate of rediscount, in the persistent absence of a bill market the need for it never arose and the relevant section of the Act was never proclaimed to be operative. The section of the Act relating to the trading banks' use of the central bank in the settlement of balances also never came into force. The banks' deposits in the central bank following 1924 remained "comparatively small and did not represent the cash re-

²⁷It was in effect revived again in 1935 when an economist, Professor L. F. Glibin, was appointed to the Board. If challenged, his appointment under the Act of 1924 could have been defended because, amongst his accomplishments, he included fruit growing.

serves of the trading banks."²⁸ Thus in the armour of orthodoxy some of the most trusty accoutrements were too outlandish to be used in Australia. Equipped against dragons, the Bank was surrounded with koala bears and kangaroos.

*A Period of Hesitation.*²⁹ In the year 1929 the Chairman of the Commonwealth Bank could still say, in his semi-annual report, "The establishment of the central reserve banking system in Australia still remains an open question." The board of the Bank, in harmony with prevalent views, favoured such a development and was willing to do whatever lay within its constitutional capacity. The extent to which its central banking facilities were utilized would depend, he said, upon the inclinations of the trading banks.³⁰

While the Bank thus stood armed with orthodoxy, awaiting the co-operation of orthodox henchmen and the arrival of an orthodox dragon, two important changes were made. The first of these had nothing to do with orthodox dragons. A Rural Credits Department of the Bank was founded in 1925.³¹ Its chief object was to finance and encourage the co-operative marketing of primary products, furthering a business which had been undertaken in the general banking department during the War and subsequently continued. The new department was not permitted to advance money to individuals nor for periods of more than a year. About one-fifth of the funds which it could obtain were to come from a grant from the Treasury and from the profits of the note issue department. The remainder could be raised by issues of debentures. Within the limits to which it is confined³² the department seems to have conducted a satisfactory business of modest amount. This must have brought the Bank closer to rural conditions and the problems of rural credit than it could have approached along more orthodox lines.

The second change between 1924 and 1929 came in 1927. It was

²⁸*Initial Statement* by Sir Claude Reading, to the Royal Commission on Monetary and Banking Systems, p. 7.

²⁹See A. L. Gordon MacKay, *The Australian Banking and Credit System* (London, 1931), chap. vi; also Jauncey, *Australia's Government Bank*.

³⁰*Directors' Report*, Commonwealth Bank of Australia, June 30, 1929.

³¹Act no. 18 of 1925.

³²O'Malley had attempted to bring the Bank into the general business of rural credits in 1917 (Jauncey, *Australia's Government Bank*, p. 145). And it was only an adverse Senate which kept the Labour Government of 1929-31 from permitting the Bank to grant rural credit to individual farmers (*ibid.*, p. 153).

the provision for legal separation of the savings bank business from the remainder.³³ This was in harmony with accepted dictates. The operation of a savings bank is not part of the business of a proper central bank. The new Commonwealth Savings Bank was duly erected; but the change was less than it seemed. The board of the new institution was in due course to be appointed by the Government; meanwhile the Board of the Commonwealth Bank proper was to act as its directorate. This situation has never been altered; for no new board has been set up. Today the Commonwealth Savings Bank holds, in nearly 300 branches and 4,000 agencies, about three-fifths of the savings deposits in Australia.

It is said that the proposed separation of the savings bank business was "the chief result" of the visit to Australia of Sir Ernest Harvey of the Bank of England.³⁴ Whether that be so or not, it cannot be doubted that the visit reflected and revived interest in the development of central banking. Sir Ernest held a series of conferences with the board of the Commonwealth Bank; and such matters as its trading and savings bank functions, the policy of concentrating gold reserves and the establishment, of a bill market, were known to be under discussion.

During the 1920's the Commonwealth Bank developed its commercial activities rather than central banking. Competition may not have been pressed in the way that the torpedo brigade would have favoured, but with the increasing demands of a growing country for banking facilities the Bank was able to extend its branches and business of all sorts. The statistics available are unsatisfactory, but some indication of what was going on may be seen in the following table giving deposits of different types in the Bank.

As for central banking, despite the impetus given by Sir Ernest Harvey's visit, it seems that the period of hesitation might have gone on almost indefinitely but for the arrival of three dragons. One was fairly orthodox although unprecedently ferocious: the

³³Act. no. 36 of 1927. Two other constitutional changes occurred before 1929; the Commonwealth Housing Act, no. 35 of 1927, and an amendment to it, no. 10 of 1928. The chief purpose of these Acts was to clarify the powers of savings banks, and particularly the Commonwealth Savings Bank, in regard to loans for housing purposes.

³⁴Jauncey, *Australia's Government Bank*, p. 166. Further information regarding the visit is given by Copland, "The Banking System of Australia," pp. 96-7; also Baster, *The Imperial Banks*, pp. 166-7.

DEPOSITS OF VARIOUS TYPES IN THE COMMONWEALTH BANK OF AUSTRALIA*

Depositors	Weekly average of figures for quarter ending	
	March, 1926	March, 1929
	£A 000,000	£A 000,000
Governments		
Interest-bearing.....	2.27	1.46
Non-interest-bearing.....	10.49	6.66
Trading banks		
Non-interest-bearing.....	5.24	14.20
Others, including commercial business and also savings banks and semi-governmental bodies		
Interest-bearing.....	6.95	12.03
Non-interest-bearing.....	6.88	9.99

*Report of the Royal Commission on Monetary and Banking Systems, p. 286.
Figures exclude deposits in the Commonwealth Savings Bank.

depression of 1929-32. The other two, as seen with the eyes of the Commonwealth Bank, were disturbingly unorthodox: Mr. Theodore, the Commonwealth Treasurer in the Labour Government of 1929-31, and Mr. Lang, the Labour Premier of New South Wales. As for Mr. Theodore, much of what he proposed to do had the support of Australian economists and was, after his ejection from office, put into effect by his political supporters and opponents; but nevertheless he was a source of grave anxiety to financiers in general and to Sir Robert Gibson in particular. Sir Robert, Chairman of the Commonwealth Bank, bitterly opposed the attempt to bring political pressure to bear upon his institution. Mr. Theodore apparently planned to make the Commonwealth Bank into the competitive trading bank for which its original constitution was designed. Moreover, he planned to found an active, politically controlled central bank; and also to export the Commonwealth's gold reserves, to issue new paper money, and to control interest rates in Australia by means of a politically appointed board.³⁵ All this was disturbing enough to conservative financial opinion. Even more disturbing, and less defensible, were the machinations of Mr. Lang. He tried to repudiate the Financial Agreement and the debts of his state. To prevent this sort of thing it took the combined efforts of the Com-

³⁵A summary and criticism of these proposals will be found in the Circular of the Bank of New South Wales (May 5, 1931), on "The Political Control of Banking."

monwealth Bank, the trading banks, the Loan Council, the Senate and, after December, 1931, a Coalition Government.³⁶ This interesting story has no place here. We must confine ourselves to a description of the development of the Commonwealth Bank after 1929.

*The Bank Becomes a Central Bank in Practice.*³⁷ The first advance towards the status of an operative central bank was a change in the way in which the trading banks held their reserves. This change of practice was not spontaneous but arose as the by-product of an emergency. In 1929 two factors appeared which were unfavourable to the Australian balance of payments: a decline in the prices of Australia's staple exports and an unwillingness in London to continue lending. These were the factors chiefly responsible for a strain on the exchange rate which developed during the year and which, at the end of the year, forced the Australian exchange beyond the gold-export point. In order to meet the demand for funds in London, which was specially urgent on the part of Governments with debts to service there, an Act was passed³⁸ which empowered the Commonwealth Bank to secure such gold as was available in Australia, and more particularly that of the trading banks. The latter might have been compelled to sell to the central bank the whole of their £17 millions of gold reserves in Australia, but made arrangements to transfer only £12 millions. In return they received deposits in their favour at the Bank. The greater part of their cash reserves has been in this form ever since.

The continued shortage of London funds (at the low price which most of the banks, including the central bank, were anxious to maintain) and the continued need of Governments for these funds in order to service debt, produced the "Mobilization Agreement" of 1930. In slightly modified form this agreement still (1939)

³⁶Norman Cowper, "The First Financial Agreement: Its Effect upon the Relations between the Commonwealth and the States" (*Economic Record*, vol. VIII, no. 15, Dec., 1932, pp. 172-90). See also the volume of documents edited by E. O. G. Shann and D. B. Copland, *The Battle of the Plans* (Sydney, 1931).

³⁷See Beryl A. Rouch, "What the Crisis Has Done for the Central Bank in Australia" (*Economic Record*, vol. XI, supplement, March, 1935, pp. 163-80); also D. B. Copland, "The Commonwealth Bank—Cooperation or Compulsion?" (*Economic Record*, vol. XV, supplement, April, 1939, pp. 21-39).

³⁸Act no. 31 of 1929. The same Act provided for the licensing and prohibition of the export of gold.

exists; and a Royal Commission has recommended that it should not remain, as at present, terminable at any time by any of the parties, but should be made more permanent. Before 1930³⁹ the Commonwealth Bank's principal source of funds in London had been governmental borrowing in that centre, and this source had completely dried up. Accordingly the Bank obtained an agreement from the trading banks that they, together with it, would month by month contribute a certain proportion of their current receipts of London funds to a pool which would suffice to cover governmental obligations abroad.

Despite these measures,⁴⁰ the Commonwealth Bank was not in control of the exchange situation. The spectacular movement of January, 1931, up to £A 130 for £100 sterling was first made in the "outside" or "black market" and then was followed and overtaken by the Bank of New South Wales. The other trading banks and the Commonwealth Bank then adjusted their rates to the new situation.⁴¹ At the end of 1931 after some conferences in which it failed to secure the assent of the banks to its proposals, the central bank without warning changed the rate on its own initiative to £A 125. Since then there has been little question regarding its responsibility for exchange rate policy. It appears from the action at that time and from later evidence that the Commonwealth Bank does not now feel bound, in its role as central bank, to secure agreement or acquiescence before changing the rate if it decides to do so. Meanwhile legislation has been passed to permit the Bank's reserves against note issues to be in the form of "English sterling" instead of gold; thus recognizing, rather belatedly in

³⁹And one other. A further amendment of the Commonwealth Bank Act, assented to in June (Act no. 6 of 1931) permitted the reduction from 25 per cent to 15 per cent of the gold reserve against the Bank's notes. The gold thus released might be (and was) exported. The Act provided that the 25 per cent ratio should be restored, in three steps, by June, 1935. This was duly done.

⁴⁰Most economists, at the time and subsequently, believed the movement of the published rates to be desirable, and the Bank of New South Wales was aware of their arguments. However, it must also be remembered that "the Wales" is a bank which, from its large business with exporters, is usually a holder and seller of London funds and thus profits by a rise in their price; while the Commonwealth Bank, if Governments are not borrowing in London, is amongst the banks which are chronic purchasers of London funds on behalf of their customers, and thus apparently sufferers if the price rises.

1932, the fact that Australia was on a sterling-exchange standard and indicating its probable continuance in that position.⁴¹

In the variation of interest rates on deposits, as in the variation of exchange rates, the Commonwealth Bank has gradually taken the lead. After the early part of 1933 all changes of rates were initiated by the Commonwealth Bank—that is, until the incident of March, 1936, in connection with its experiment in selling treasury bills to the public. Then again the central bank and the largest trading bank ran foul of each other.

The Bank has also made tentative steps towards the use of open market operations. These were used, the Acting Chairman claimed, for the first time in 1935.⁴² The operations to which he referred were undertaken, not by the Commonwealth Bank proper, but by the Commonwealth Savings Bank; but because the Savings Bank keeps its cash reserves as deposits at the Commonwealth Bank, its purchases or sales of securities duly augment or diminish the reserve-deposits of the trading banks. More recently other actions of a similar sort have been undertaken.

(4) CONCLUSION

The Commonwealth Bank has powers at its disposal of a variety altogether exceptional in a central bank. Its origin as a semi-commercial institution freed its general banking department from those restrictions which accepted practice has imposed upon the operations of most central banks. Section 34 of the Commonwealth Bank Act has not been materially amended since its first passage. It reads:

34.—(1) The Bank may invest any moneys held by it—

- (a) in any government security approved by the [Commonwealth] Treasurer, or
- (b) on loan on the security of land, or
- (c) in any other prescribed manner.

(2) Nothing in this section shall prevent the Bank, in carrying on the business of banking, from making advances to a customer on any security which the Board thinks sufficient.

The Bank has not pressed its wide powers very strongly in competition with the trading banks, officially it has not pressed

⁴¹Act no. 16 of 1932.

⁴²Commonwealth Bank of Australia, *Reply to Questionnaire*, July-Aug., 1936, pp. 3-4.

them at all; nevertheless its commercial business grew considerably in the nineteen-twenties and has continued to extend in the nineteen-thirties. It stands willing to accept fixed deposits from any customer; and current accounts also, although it will not make loans to new customers unless they are unable to obtain satisfactory accommodation from their trading bankers. There is general agreement that its trading activities are a necessary adjunct to its responsibilities as a central bank.⁴³ It already does the whole of the banking business for the Commonwealth and for four out of the six states, the two exceptions being the important States of Victoria and New South Wales. It also does a portion of Victoria's business within Australia. The type of new business which it most readily accepts at present is that of municipalities and semi-public bodies.⁴⁴

The modest business of the Rural Credits department and the extensive business of the Commonwealth Savings Bank have been described on pages 77 and 91-2.

The ability of the Commonwealth Bank to influence the credit base of the commercial banks depends upon a number of factors. The most usual means at the disposal of a central bank are open market operations. The extent to which these may be serviceable is dependent upon the breadth of the local security market; and this is at present a matter of dispute in Australia. Another means at the disposal of the Commonwealth Bank is its power to lend to the trading banks or rediscount bills for them. As long as the Bank maintains its position as a competitive commercial concern the other banks are unlikely to make much use of it in these ways; for no business man will willingly accept a position of dependence upon a competitor. Another means by which the Commonwealth Bank may influence the liquid assets of the banks is by exercising

⁴³See Commonwealth Bank of Australia, *Reply to Questionnaire*, July-Aug., 1936, p. 3. The Bank's trading activities are considered to be "in the absence of an effective bill market . . . essential to any attempt to control credit"; also Davidson, *Replies to Questionnaire*, pp. 75 and 81-2; also L. G. Melville, Economic Adviser of the Commonwealth Bank of Australia, statement to the Royal Commission on Monetary and Banking Systems in Australia, May, 1936, published by the Commonwealth Bank, pp. 6-7 and 9. And much other evidence as well.

⁴⁴Commonwealth Bank of Australia, *Reply to Questionnaire*, submitted by the Royal Commission on Monetary and Banking Systems, March, 1936, published by the Commonwealth Bank, p. 5.

persuasion over the Loan Council in regard to the issue of treasury bills, which the Australian banks regard as practically the equivalent of cash. But the treasury bill situation may be a source of weakness rather than strength if the Bank cannot persuade the Council to its point of view.

Through its various departments and activities the Commonwealth Bank touches the Australian credit structure directly at many points. There are its advances to Governments and other customers in the general banking department, its receipts of deposits in this, and, more important, in its Savings Bank division, its willingness to purchase securities out of currently accumulating deposits of various sorts and its loans to co-operatives through the Rural Credits department. All these operations bring it directly into contact with finance at one point or another. Moreover, expansion or contraction in any or all of these lines normally produces equivalent changes in the credit base of the commercial banks. As a further means to this end several suggestions have been made that the Bank should from time to time place deposits with the commercial banks when expansion was favoured, and withdraw them when the time for restriction arrived. Presumably these practices are already within its constitutional power. None of these activities is as delicate as open market operations for controlling the credit base, and they cannot be used with great facility or rapidity. None the less, while clumsier, they have this advantage over such operations, that some of them directly influence the stream of money incomes. Taking all these things into consideration it seems fair to conclude that, if the Commonwealth Bank were willing to exert its powers in one direction or another and if these were not counteracted by the Loan Council, the Bank could exercise a very important, although delayed, influence over the Australian credit structure, and parts of the interest rate structure. The real question, granted willingness of the Bank to initiate and follow up definite policies of expansion or contraction, is not so much whether its ultimate powers are sufficient, but rather whether its influences can spread sufficiently rapidly through the credit system to achieve useful objectives. On the matter of rapidity two observations may be made. First, the more the Bank undertakes ordinary commercial business and the more it becomes involved in ordinary banker-customer relationships, the less

rapidly will it be able, with justice to its individual clients, to alter its credit policy in harmony with national needs. Second, and on the other hand, it is doubtful whether in the relatively simple economies of Australia and the other Dominions, the need for rapidity and delicacy is as great as in more mature financial centres. In the Dominions the signs of the times are relatively easy to read, whether they are found in the weather or in the tone of capital and commodity markets across the seas.

As for controlling the exchange rate and the foreign funds of the Australian banking system, this depends in the long run upon matters yet to be discussed, matters connected with the variability and responsiveness of the important items of the balance of international payments. As for short run control, it is clear that the Commonwealth Bank is normally, in the absence of special agreements, in the weak position of a buyer of exchange, contrasting with the strong selling position occupied by the central banks in New Zealand and South Africa. On the other hand, compared with the Bank of Canada, it seems fortunate in at least two things: first, in that the exchange market is one in which stable published rates are the custom, rather than volatile, competitive rates; and second, in that the import of capital for governmental purposes is centralized under the control of the Loan Council.

The Commonwealth Bank requested in 1936 that its powers should be extended. In its evidence to the Royal Commission on Monetary and Banking Systems it desired:⁴⁵

- (a) The right to call upon the overseas funds of the Australian Banking System.
- (b) An obligation on the trading banks to maintain with the central bank not less than a fixed percentage of their liabilities to the public.

But if the Commission's recommendations were adopted by Parliament, history would be repeated in that the Bank would receive more powers than it requested—and probably more than it wanted; for, in the Report, the suggestion was made that the Bank should, amongst other things,

- (a) Be relieved of restrictions upon the assets held against the note issue, the only provision left being for a maximum issue;

⁴⁵Commonwealth Bank of Australia, *Reply to Questionnaire*, July-Aug., 1936, p. 3.

- (b) Be allowed, with the consent of the Commonwealth Treasurer, to require the trading banks to keep for short periods a certain proportion of their deposits on deposit in the central bank; and to vary this proportion;
- (c) Reach a more extensive and durable Mobilization Agreement with the trading banks; the form of the agreement being such that the Commonwealth Bank would probably from month to month obtain an increasing amount of the trading banks' reserves of London funds.

If these weapons were added to its armoury the Bank would indeed be well equipped. Regarding recommendation (b), which became a storm centre in Australian financial circles, more is said in Chapter X, section 3.

It cannot be mere good fortune that has provided Australia with a number of institutions, such as the Commonwealth Bank, which, when international comparisons are made, appear to be specially appropriate to their environment.⁴⁶ The Commonwealth Bank is certainly one of the most remarkable financial institutions in the British Dominions. It deserves a better description, a fuller and more critical analysis, than this chapter can give or than has been given in the two volumes that have been written upon it.⁴⁷ If, among the Dominions, leadership in the device of new methods of central banking is to be forthcoming, the Commonwealth Bank is already the best equipped to supply it.

And yet the history of the Commonwealth Bank does not for the most part disclose bold strokes of finance or successful innovations in central banking. How is this to be explained? Partly in terms of some lack of initiative on the part of the Bank. It was not conceived as a central bank, and its staff and directorate have only relatively recently been turning their minds from other business to central banking. Activities of this sort were thrust upon it, partly by legislation and partly by the force of events. The objectives of the directors and officers, like those of the Bank

⁴⁶See D. B. Copland, *Australia in the World Crisis, 1929-1933* (Cambridge, 1934, chap. iv, "The Flexibility of Institutions"); also review by A. F. W. Plumptre (*Economic Journal*, March, 1935, pp. 131-3).

⁴⁷This may seem ungrateful; for this chapter has to some extent relied upon the books by C. C. Faulkner (*Commonwealth Bank of Australia*) and, more especially L. C. Jauncey (*Australia's Government Bank*). Jauncey's book is the more academic; but Australians may be acquainted with the uncomplimentary and not entirely undeserved review which it was given by the late Professor Shann (*Economic Record*, vol. X, no. 18, June, 1934).

of England in the days of Bagehot, may thus have been confused and controversial; at times even contradictory. The leopard remains spotty. The spottiness may have been prolonged by special personal relationships within the Bank. This much is clear: Sir Robert Gibson who, in the formative years following 1924 was Chairman of the Bank's directorate, was sufficiently forceful to attract much power into his own hands. Whatever his gifts in other directions it is patent from his many utterances that he never acquired the point of view of a modern central banker; nor was the heterogeneous group of directors, which Governments appointed beside him, sufficiently powerful or well informed to guide him. Unfortunately such a dominant personality at the head of the directorate naturally tended to withdraw influence from the permanent officers of the Bank; for, continuously confronted with central banking problems, they at any rate would have acquired the appropriate point of view. Possessed of the proper point of view, and of greater influence, their approach to central banking practice might have been less tentative. Recent developments seem to reflect the emergence of a more positive attitude.

Apart from these innate causes of arrested development, the chief external causes have been the rather delicate political status of the Bank, discussed below in Chapter IX, section (3); and, more important, the persistent misunderstanding—indeed a stronger word might not be inappropriate—between the Commonwealth Bank and the Bank of New South Wales. While the Commonwealth Bank has been gradually feeling its way into central banking the financial air has often been charged with suspicion and mistrust. Such an atmosphere would be detrimental even to the most adroit and skilful of central banks; and that the Commonwealth Bank has yet to prove itself.

CHAPTER III

THE CAPITAL MARKET AND THE RESERVE BANK OF NEW ZEALAND

(1) FINANCIAL INSTITUTIONS¹

ONE of the most interesting features of New Zealand's financial institutions is the extent to which they are operated by the state. Important and active roles are played by the State Insurance Department, the Public Trust Office, the State Advances Corporation, the Post Office Savings Bank, and the Reserve Bank. In addition the Government appoints a majority of the directors to the dominant commercial bank, the Bank of New Zealand; and although for many years the Government was a sleeping partner in the direction of the Bank, there have been signs of awakening since the election of a Labour Government in 1936. One may hazard the opinion that the extent of the state's financial operations reflects on the one hand the desire of New Zealanders to run their own affairs and on the other hand the inability of private firms, with their business confined to the relatively small and specialized demands of this pastoral and agricultural Dominion, to withstand the pressure or the competition of larger, stronger concerns operating from Australia or England.

Commercial Banks. There are six banks in New Zealand doing an ordinary commercial business. It is similar to that conducted by the banks in Australia, and described in the previous chapter; indeed four of the banks do the greater part of their business in Australia.

The chief assets and liabilities of the banks, in relation to their New Zealand business, are set forth in the accompanying table.

¹See *Report and Minutes of Evidence of the Monetary Committee* (Wellington, 1934); also H. Belshaw, "The Financing of Land Purchase and of Farming Operations" (*Agricultural Organization in New Zealand*, symposium directed by H. Belshaw, Melbourne, 1936, chap. ix); also the *New Zealand Official Year Book*; also T. Hytten, *Memorandum on the Banking System of New Zealand* (mimeographed by the Bank of New South Wales, 1937); also H. W. Larsen, "Banking in New Zealand" (thesis presented for the degree of M.A. in the University of New Zealand, 1936, typescript).

**CHIEF ASSETS AND LIABILITIES OF COMMERCIAL BANKS IN RELATION TO
NEW ZEALAND BUSINESS***

Last Monday in June, 1938

	<i>Assets</i>	£NZ 000,000
Coin, notes of, and deposits with the Reserve Bank.....	12.0	
Net oversea assets.....	9.5	
Securities held (almost entirely N.Z. Government).....	7.0	
Advances and discounts.....	<u>54.9</u>	
Total assets (including other items).....	<u>83.4</u>	
	<i>Liabilities</i>	
Demand liabilities.....	35.1	
Time liabilities.....	31.1	

*Figures from *Statistical Summary of the Reserve Bank of New Zealand*, June, 1939, p. 203.

The distribution of the banks' advances is shown in an accompanying table. Like the Australian banks, those operating in New Zealand make a large proportion of their advances to primary producers; and many of these advances, although nominally recallable on demand, are in effect long term loans secured upon land. In 1938 a New Zealand banker explained that bank advances to farming and associated industries had been increasing because legislation for the relief of mortgagors had checked the flow of mortgage money in those directions.²

DISTRIBUTION OF ADVANCES BY COMMERCIAL BANKS IN NEW ZEALAND*

Last Monday in June, 1938

	£NZ 000,000
Farmers.....	18.8
Industries allied to primary production.....	5.6
Other manufacturing and productive industries.....	4.6
Merchants and wholesalers.....	4.8
Retailers.....	3.8
Transport.....	.7
Local bodies, public utilities, etc.	1.3
Stock and station agents.....	1.3
All other.....	<u>13.3</u>
Total advances.....	<u>54.2</u>

*Figures from *Statistical Summary of the Reserve Bank of New Zealand*, May, 1939, p. 187.

²"Report of the Annual Meeting of the Bank of New Zealand" (*Economist*, London, Aug. 20, 1938, p. 374).

Of the six banks only one has its head office in New Zealand. This is the Bank of New Zealand. In 1936 it operated 221 out of the 516 branches in the Dominion, and controlled £NZ 30 millions out of the £NZ 70 millions of banking assets (excluding funds abroad). The next biggest business was done by the National Bank of New Zealand (86 branches and £NZ 15 millions assets), the head office of which is in London and which operates an exclusively New Zealand business. The remaining business was divided between four banks, all of which operated chiefly in Australia, two of their head offices being in that Dominion and two in London.

The banks take common action through an organization known as the Associated Banks of New Zealand. This body, consisting of representatives of the banks, agrees upon the rates of interest on fixed deposits and minimum rates on advances; and is, on occasion, the official mouthpiece of the banks in making representations to the Government or the Reserve Bank.

Insurance Companies. In 1936 there were thirteen companies transacting life insurance business in New Zealand, in addition to the Government Life Insurance Office. The distribution of their assets held in New Zealand is indicated in the accompanying table.

CHIEF ASSETS OF LIFE INSURANCE BUSINESS IN NEW ZEALAND*

(*Industrial and Ordinary Business at End of 1936*)

	£NZ 000,000		
	13 companies	Government office	
Mortgages on property.....	9.4	3.9	
Loans on policies.....	5.8	1.2	
New Zealand Government securities.....	9.4	3.4	
Local authorities' securities.....	17.0	1.2	
Total assets (including other items).....	47.1	10.5	

*Figures compiled from the *Official Year Book of New Zealand, 1938.*

The insurance companies operating in New Zealand advance relatively little money on rural security, most of their mortgages being urban. It is doubtful whether rural mortgages exceed £NZ 2 million; and over half of that is the business of one company. Private companies have been kept out of this field, which might have seemed the most natural outlet for long term investment in the fundamentally rural community of New Zealand, partly by

the competition of the Public Trustee and the State Advances Department (now merged into the State Advances Corporation of New Zealand); partly because, unlike the banks and the governmental bodies, they have no network of rural agencies; and partly³ because the system of company taxation encourages investment in tax-free public securities rather than in mortgages, whether rural or urban.

At the end of 1936 rather more than 40 per cent of the business was transacted by one society, the Australian Mutual Provident. Another 20 per cent was done by the Government. Other Australian companies did most of the remainder, and only a very small share fell to the three New Zealand companies. The large funds disposed by the Life Insurance Department of the Government generally follow, as the table indicates, the same channels as the funds of private companies, with the important exception that the Government department invests relatively little in the securities of local authorities. Payment of all policies issued by the Department is guaranteed by the Government.

Trust and Loan Business. By far the largest part of this business is transacted in New Zealand by the Public Trust Office. At the end of the first quarter of 1938 the total value of the estates under administration exceeded £NZ 60.8 millions. A substantial proportion of these funds, probably about one-third, was invested in mortgages.⁴ It is interesting to note that, except when express provision to the contrary is made, estates are not managed separately but the assets of all are merged into a common fund. All estates under the management of the Trust are guaranteed by the state.

In 1938 there were seven companies engaged in the administration of estates, and other trustee business. The amount of their business was not great.

Trading Companies; Stock and Station Agents. The provision of rural credit in this predominantly pastoral Dominion has been of great importance. Loans to dairy farmers and to the owners of sheep stations and their like are never, in any country, easy to secure or administer. They can never be made upon the impersonal

³Belshaw, "Financing of Land Purchase," p. 152.

⁴Neither the annual reports of the Trust Office nor the *Official Year Book* give figures for the distribution of assets.

basis of a free and open market. Indeed, it is partly because there has been so much scope for capital investment of this specialized, unstandardized type in New Zealand that the open security market is so undeveloped.

Although the Government has in a number of ways to be described below facilitated the extension of rural credit, the greater part is still supplied from private sources. Most interesting and perhaps most important amongst these are the so-called stock and station agents. There are about thirty, three of them very large concerns with extensive interests. All but two of the large ones have raised their capital in New Zealand, chiefly from the wealthy pastoral community; and those two are primarily Australian enterprises. The business of all of them is to collect and market the agricultural and pastoral products of their clients, most of whom are sheep farmers, and to supply them with machinery, fertilizer, and even, if it is on a wholesale scale, with food and drink. In the purchase of primary products they act as brokers on their customers' behalf; but in the supply of merchandise of all sorts the larger ones at any rate act as dealers, laying in stocks of goods of all sorts and issuing illustrated catalogues after the fashion of the big mail-order department stores in Canada and the United States.

Their lending business is ancillary to their trading business. Their clients run accounts with them, at times incurring overdrafts for the purchase of merchandise, secured on the prospective wool clip or in some other way, and at other times, when the produce has been sold, discharging their indebtedness and leaving balances on deposit with their agents. It is not uncommon, in countries dependent upon the large scale production and export of primary products, to find general merchants occupying a position of considerable importance, their intimate knowledge of their customers' affairs placing them in a position to know how far credit can reasonably be extended; but nowhere in the British Empire, and probably in the world, have these merchants become so strong, nowhere have they developed so wide a system of branches and agencies, as in New Zealand and Australia.

The credit which the stock and station agents extend is always, nominally at least, for short term; to finance the seasonal swings of their customers' finances. In addition, however, the agencies occupy

a strategic position in relation to the extension of credit for the purchase of land. They do not provide loans for this purpose themselves, but they do act as agents for buyers and sellers; and if one of their clients, a would-be buyer, lacks necessary cash he will be referred to some source of long term credit—the insurance companies, the banks, governmental agencies, or to private lenders with whom the agents are familiar. In any of these cases the borrower is likely to pay considerable attention to the judgment and advice of the agent. During the nineteen-thirties, when the pastoral industry was expanding less rapidly than formerly, the business of the agencies in relation to the sale and purchase of land fell from a major to a minor part of their activities. The judgment and advice of the agents are still important, however, in regard to the type of stock, pastures, manures, etc. which their clients use. They replace in a measure the branch banker who, in other rural districts and countries, is the usual financial adviser and confidant.

Land and Agricultural Banks. In 1936 the State Advances Corporation was established. It took over the extensive assets and lending business of the Mortgage Corporation of New Zealand; which, in its turn, had only a year previously been set up by a former Government to undertake the business of the long-established State Advances Department and various other government lending agencies. This Corporation is now the largest source of long term rural credit in the Dominion. Through it the Government makes advances not only to individuals and co-operatives but also in some measure to local authorities. In doing so it is, in effect, acting as intermediary between the well-organized capital market, where rates are low and liquidity high, and that ill-organized region of finance where rates are high, customer-relations predominate, and liquidity is almost non-existent. This is a usual function for the Government of a new country; but it is nowhere more evident than in New Zealand. In this role a unitary state enjoys advantages over a federation. What New Zealand and the Union of South Africa have achieved in the finance of local activity through their central Governments had to be gained through the Financial Agreement in Australia with contemporary searchings of heart and subsequent recriminations; while Canada

produces a good many recriminations without the advantages of centralized borrowing.

At the end of the first quarter of 1938⁶ the Corporation had raised a total of £NZ 58.5 millions, chiefly in the form of stock and debentures (£NZ 41.6 millions) and contingent liability to the Crown (11.4). Chief amongst its assets were mortgages (51.2) and the securities of government and local bodies (5.1). Recently it has been active in encouraging new housing developments in the Dominion and in managing government housing schemes.

The Bank of New Zealand established a Long Term Mortgage Department under legislation of 1926. Long term credit facilities have thus been made available through the numerous branches of the Bank. These facilities have not yet been used very extensively; and in 1938 the total advances of the new Department were just over £NZ 1.3 million, of which very little was for rural purposes.

Savings Banks. The greater part of the small savings of New Zealand is accumulated in the Post Office Savings Bank. At the end of 1937 its deposits amounted to £NZ 58 millions. Of its assets, £NZ 54 millions were in New Zealand government securities, and a further £4 millions in government stock of other British countries.

In addition there are five trustee savings banks, operated in Auckland (doing more than half the total business), Invercargill, Dunedin, New Plymouth, and Hokitika. In 1937 their deposits amounted to £NZ 12 millions. More than half their assets were in the form of mortgages, chiefly urban, and most of the remainder in the securities of the Government and local authorities.

Building Societies. In 1937 there were ninety-nine of these societies operating in New Zealand. Their available funds amounted to £NZ 9.6 millions. Of this, 6.1 was obtained from shareholders and accumulated profits, 3.0 from deposits, and 0.3 from bankers and other creditors. Of their assets, 8.7 were in the form of advances on mortgages.

A number of friendly societies of various types were also in operation. Of their £NZ 5.0 millions of assets, 3.7 were in mortgages, and 0.2 in government and municipal debentures.

⁶In its *Annual Report* for 1938, p. 14, the balance sheet appears under the apparently mistaken year-title of 1937. The previous *Annual Report* gives quite different figures for the same date in 1937. The figures in the later report are therefore assumed to be for 1938.

(2) THE CAPITAL MARKET

New Zealand, says one of its economists, is "a decentralized rural democracy dependent in an uncommon degree upon an external market at the other side of the world. . . . There is a striking absence of urban concentration and a comparatively weak development of manufacturing industry."⁶ Such a country is not one in which we should expect to find great accumulations of free, loanable capital. Nor should we expect a well-developed capital market.

Security Markets. As in Australia, a large part of the cost of developing the country has fallen upon the Governments. More than half of the necessary funds have been secured in England. But in the smaller country the scope for private industrial enterprise has been far less, so that the security markets have less variety and breadth. There are, to be sure, several stock exchanges; the two most important in Auckland and Wellington and others in Christchurch, Dunedin, Invercargill, Gisborne, and New Plymouth. The record of a week's trading will show transactions in, perhaps, fifty or sixty different shares: those of the local banks, trading companies, and financial institutions, and of a number of local manufactures. The list will include three or four debentures issued by private companies, a few issued by local bodies, and perhaps eight or ten issues of government bonds and stock. There will also be a number of Australian shares listed. The securities of companies, such as banks, which operate in Australia and New Zealand are listed in both countries. New Zealanders may also, from time to time, buy other Australian issues, often of the more speculative type; indeed the tone of the New Zealand markets depends largely on Australia. The net movement of capital on account of security purchases is probably from New Zealand to Australia; certainly this has been the case since the New Zealand Labour Government was elected in 1936. On account of direct capital investment (e.g., in bank branches) the movement is probably in the opposite direction.

A central bank's concern is more directly with government stock, debentures, and bonds than with the shares of private companies. This department of the local market has been described as narrow and sluggish; a market in which the quotations

⁶J. B. Condliffe, *New Zealand in the Making* (London, 1930), p. 23.

are often merely nominal.⁷ It may be significant that the *Official Year Book's* table of the prices of New Zealand stocks refers exclusively to prices in London; and no New Zealand quotations are given. This is despite the fact that about half of the Government's loans are domiciled in the Dominion and more than half of these were held by private financial institutions and the general public. In 1938 the figures were roughly these: £stg. 130 millions of debt were in London and the same amount (in local currency) in New Zealand. Of the latter, £NZ 60 millions were held by government departments. Thus, in effect, the Government had issued nearly half its obligations in New Zealand, not as marketable securities, but through the offer of facilities for savings deposits, life insurance, and other financial business. Here is another instance of the undeveloped state of the capital market.

An accompanying table shows the chief investors in the securities of the Government and local bodies in New Zealand, together with a rough indication of the size of their holdings.

**DISTRIBUTION OF THE SECURITIES OF THE GOVERNMENT AND LOCAL AUTHORITIES
IN NEW ZEALAND AMONG VARIOUS HOLDERS***

<i>Institutions</i>	Holdings of N.Z. government and local bodies' loans in N.Z. End of 1938	
	£NZ 000,000	
The Reserve Bank of New Zealand.....	2.7†	
Six trading banks.....	6.0	
Post Office Savings Bank (March 31, 1936).....	54.6‡	
Fourteen life insurance companies (only three being purely N.Z. companies).....	26.4	(17.0)§
Forty-three fire insurance offices (fourteen with head offices in N.Z.).....	8.7	(2.1)§
Government Life Insurance Department.....	4.6	(1.2)§

*Figures from *Official Year Book of New Zealand*, 1938.

†Some and perhaps the greater part of the Reserve Bank's holdings are in London.

‡March 31, 1937.

§Amounts in local government securities many of which, as in Australia, would not be marketable. The securities held by the various banks are practically all issued by the New Zealand Government.

⁷A. G. B. Fisher, "A Policy for a New Zealand Reserve Bank" (*Economic Record*, vol. XI, no. 21, Dec., 1935, pp. 157-66).

None of these investors are very active traders, in and out of the security market. They buy securities as investments, and not for profit on changing prices:⁸ and they rely upon London, and to a lesser extent upon the capital markets of Australia and other countries, as sources of funds in emergencies. A large proportion of New Zealand's finance is still conducted by companies with their head offices and much of their assets abroad. This has militated against keen competition in the local security market.

The machinery through which long term securities are issued and traded reflects the lack of development and specialization of the market. In the New Zealand stock exchanges (and this is, surprisingly enough, still true of Australia) there is no continuous trading. Instead, the members of each exchange gather once or twice a day, the whole list of shares is called over, and trading in any issue takes place when it is called. Some trading goes on at other times outside the exchanges, sometimes most of it; but the system descends from the days when those with securities to trade forgathered occasionally and more or less casually. Nor have the days yet come when all members of the stock exchanges in New Zealand operate a brokerage business exclusively. New members of the larger exchanges must conform to this standard, but many of the older members are accountants, estate agents, auctioneers, and so forth. Within the security business itself there is little specialization, the same firms undertaking to float new companies, issue new securities, underwrite flotations, and operate in outstanding issues.

Despite these things, interest in fairly liquid, marketable securities has been developing in New Zealand. It is said that outstanding issues are fairly widely distributed, as one would expect in a country, basically pastoral, with a comparatively even distribution of wealth. The forced War Loans, under which people were compelled to take up government issues in proportion to their incomes, widened the knowledge of securities as a form of invest-

⁸New Zealand Monetary Committee, 1934, *Minutes of Evidence*. See the answer (on p. 31) to question 19 in the questionnaire addressed to the Associated Banks; and also the verbal evidence of the bankers on p. 43 to the effect that if they wanted cash in New Zealand they would sell securities, not locally, but elsewhere. Indeed, it is said that one of the insurance companies, doing a large business, has boasted that it never sells securities.

ment. Again, in the nineteen-thirties, the depression threw mortgages and personal loans into an unfavourable light; and the advantages of marketable securities contrasted favourably. In such ways, responding to a variety of stimuli, does a liquid capital market gradually emerge.

Bill Market and Short Term Lending. There is no bill market in New Zealand. Bills of exchange are used to finance imports and exports, but there is no market in them locally. The rate of interest upon export bills is determined by that in the market, usually London, upon which they are drawn: on import bills the rate is governed by that currently quoted by the banks for short term accommodation in New Zealand. The Reserve Bank quotes a rate for the rediscount of bills; but no use has ever been made of this facility. The Governor of the Bank, in his Annual Report in 1936, stated that his board favoured that all practicable steps should be taken towards the ultimate establishment of a bill market.*

Treasury bills are beginning to occupy a place of importance in the New Zealand financial system. For many years before the establishment of the Reserve Bank they were issued, from time to time, the amount of the issue and the rate being settled more or less informally between the Treasury and the trading banks. These banks normally took up all the bills; but during the depression following 1929 the Treasury could place a few with other applicants in search of outlets for their surplus funds. Since the arrival of the Reserve Bank it has handled all issues. Between 1934 and 1938 government revenues were on the whole ample and the Treasury's need to issue bills never exceeded a few million pounds; many of those issued, and probably most, were taken up by the Reserve Bank and the remainder it distributed either to the trading banks or to government departments with excess funds. In the latter part of 1938 and early 1939 the issue expanded rapidly. Most were taken up by the Reserve Bank, and, as this is written in the middle of 1939, no permanent procedure for dealing with the larger issues has been introduced. All bills are normally held by the original purchasers until maturity. There is no market in them, and as long as present procedures prevail there is no likelihood that one will emerge.

*The Reserve Bank of New Zealand, *Report of the Board of Directors for the Year ended March 31, 1936*, p. 3.

The greater part of short term credit in New Zealand exists in the form of advances by the commercial banks and deposits in them and other institutions. Other depositaries are the Post Office Savings Bank, the trustee savings banks, and the stock and station agents. Deposits in savings banks are for the most part of small amounts. Rates of interest are published; but rates lower than those published are paid upon large sums and maxima are set above which deposits earn nothing. The trading banks receive large amounts on fixed deposit and in collaboration determine and publish the rates to be paid. The rates of the stock and station agencies used to be set about $\frac{1}{2}$ per cent higher than the trading banks. Since 1932 the maximum rates of these agencies and the savings banks have been settled by order-in-council. This came about at a time when the trading banks were under pressure to reduce their rates and were afraid of losing some deposits to their competitors. Actually they need not have been very fearful; for the savings banks and trading agencies used to keep their cash reserves chiefly in the form of deposits with the commercial banks, and whatever deposits the public transferred from the banks to the other depositaries would largely have been re-deposited by them in the banks. Nowadays the situation is a little different because the Post Office Savings Bank keeps its cash chiefly in the Reserve Bank, so that deposits transferred to it from the commercial banks or other depositaries do deplete the cash reserves of the commercial banks.

Turning to advances, we find that minimum rates are published by the associated banks. General movements of rates on advances take place simultaneously, and usually shortly after movements of the deposit rates.¹⁰ These minimum rates moved ten times between June, 1920, and November, 1934, four of the movements being in the period following February, 1930, when there was considerable pressure from the Government to secure reductions: indeed one of the movements was mandatory. The range over the whole period

¹⁰New Zealand Monetary Committee, 1934, *Minutes of Evidence*, pp. 28, 37, and 46. The lag in the movement of the published rates on advances is there explained because many fixed deposits run for two years; therefore the published deposit rates must have been altered for some time before a substantial difference is made in the cost of all the money received on fixed deposit. Changes in the advance rates apply to all advances immediately: but changes in the deposit rates apply only to new deposits for fixed terms.

was from 7 per cent down to 4½ per cent. At the middle of 1939 it was still at the latter level.

Foreign Exchange Market. The New Zealand market in exchange is, or used to be, essentially similar to that in Australia, which was described in the previous chapter. Published rates are set by the trading banks acting in concert, a spread of 10/- per £100 stg. usually being maintained between buying and selling rates. Within that spread competition takes place, probably less than in Australia; but the dealings outside the banks of a few large exporters are of greater significance than in Australia, and a published spread of more than 10/- sends too much business into outside channels.

When the Reserve Bank began business it was necessary under the constitution to announce buying and selling rates. It chose £NZ 124 and £NZ 125 per £100 stg.; the spread being 20/--. It is said that some desire was expressed within the Bank for an even wider published spread because it might be easier to defend, and thus less likely to be revised as a result of alterations in the balance of payments. The banks, as already mentioned, could not keep their exchange business intact if their spread exceeded 10/-; and they chose rates of £NZ 124 and £NZ 124/10. They chose the lowest rates possible within the spread permitted by the central bank, partly because there were continual rumours that the New Zealand pound might be restored to parity with sterling and partly because it seemed likely that on balance they would sell funds to the central bank. They did not anticipate circumstances in which they would have to buy dearly from the Reserve Bank a part of what they sold cheaply to the public.

The situation was changed, however, when in 1936 a Labour Government transferred all the financing of dairy exports to the Reserve Bank. The Bank then became a net seller to the other banks of sterling received from dairy exports; and they, buying from it at £NZ 125 and selling to their customers at £NZ 124/10, would have made a loss on all they had to handle in this way if special arrangements had not been reached. It seemed inexpedient for them to alter their published rates; particularly because the Labour Government had, in an excess of national pride during the elections, announced its determination to restore the New Zealand pound to parity, and any action by the banks in

moving the currency still further from parity might be misconstrued.¹¹ They maintained their original rates until October, 1938, when, in the face of a large speculative efflux of funds, they changed to £NZ 124/10 and £NZ 125. In December the Labour Government blocked the exchange, although not very tightly, relieved the Reserve Bank of its obligation to sell sterling, and instituted an elaborate system of rationing imports. An outside or black market soon grew up, dealing at rates some 10 per cent higher than those published by the banks: and there, in the middle of 1939, the situation rests.

(3) THE RESERVE BANK OF NEW ZEALAND

In a number of countries central banking functions have been assumed by some institution which was founded at an earlier date for other objectives. This was so in England; and, amongst the Dominions, it was also so in Australia. It might easily have been so in New Zealand; for there the largest commercial bank, the Bank of New Zealand, had been for forty years a semi-state institution. In a time of crisis the Government had rescued it and ever since had owned a large portion of the stock and appointed a majority of the directors. As it happened, however, the influence of the state was never exercised; and eventually the Bank of New Zealand, as a leader amongst the associated banks, was one of the most active opponents of the Government's central banking policy.

Original Constitution. The capital market of New Zealand is in the most undeveloped, the most nearly pioneer, state of any of those under consideration in this book. Nevertheless the country was originally invited by the experts who were consulted to introduce a central bank of rigorous orthodoxy. In Chapter VII we shall consider the changes which the Reserve Bank Bill underwent during the three years before it finally emerged from the New Zealand Legislature. Even then it embodied the greater part of accepted central banking precepts.

The Reserve Bank of New Zealand was established by an Act

¹¹A further reason was also advanced in banking circles. It was said that, in the old days when the premium and discount on sterling used never to exceed a few shillings, movements of that size exercised a considerable influence on their clients' behaviour. Now that the premium had gone to about £NZ 25, a movement of 10/- would exercise no influence!

of 1933.¹² Its ownership was, in accepted fashion, vested in members of the public. They were permitted to purchase the £NZ 500,000 capital; which was dispensed in blocks not to exceed £NZ 2,500.¹³ A cumulative dividend of 5 per cent was made first charge upon the net profits of the Bank. The Government subscribed some of the funds with which it started business; to wit, £NZ 1,000,000, which was paid into the Bank's "general reserve fund" and was only recoverable in the event that the institution should be wound up.

The control of the Bank was placed in the hands of a board. It consisted of a Governor, Deputy Governor, the Secretary of the Treasury (without voting power), and seven directors retiring in rotation. The two Governors were, in the first instance, appointed by the Government and were subsequently to be appointed on the board's recommendation. In the first instance, too, all the seven directors were appointed by the Government; but subsequently, as the terms lapsed, four of the places were to be filled by shareholders' election, and only the remaining three by government appointment. The shareholders were instructed to choose two of their four representatives from primary industries and two from industrial and commercial pursuits.

An executive committee of the board was established. It consisted of the Governor, Deputy Governor, and at least one other director. Between the meetings of the larger body the executive might exercise all its powers; except that the rate of discount upon bills, a matter of such signal moment, might not be altered except in a case of the utmost urgency.

The powers of the Bank were partly adequate and partly inadequate for operations in its financial environment. In general, it was able to extend credit when approached by a reputable would-be borrower. Its power to lend to the trading banks was ample for all probable contingencies. It might also make short term loans to, and discount bills for, others besides the banks. The amounts which it could lend to the national Treasury and government departments were limited to one-half and one-fourth of their estimated annual revenues; and it was made clear that these

¹²The Reserve Bank of New Zealand Act, no. 11 of 1933.

¹³This was subsequently reduced to £NZ 1,000. See *Report of the First Ordinary General Meeting* (June 7, 1935, Reserve Bank of New Zealand), pp. 31-2.

borrowers had no pre-emptive right to accommodation. More limited were the Bank's powers to operate on its own initiative. It was enabled to invest freely in such securities as were not on the market in New Zealand: bills of exchange of various types and maturities, and local treasury bills of three months' currency. It was also permitted to invest freely in treasury bills in the far-off United Kingdom. Longer term securities, both of the New Zealand and United Kingdom Governments, might be bought; but in aggregate amount equal only to three times the Bank's paid-up capital plus reserves.¹⁴ At the time the Bank started business these together amounted to £NZ 1.5 millions.

The Bank was made the sole source of legal tender paper money in the country, the rights of the trading banks to issue currency being rescinded. It was instructed at all times to publish a minimum rate at which it would discount or rediscount bills. More important, it was required to fix the rates at which it would exchange its notes for sterling. Thus the Bank was, from the outset, recognized as responsible for the price of foreign exchange.

The provisions for reserves against the note issue implied a legal recognition, for the first time in the monetary history of New Zealand, that the country was on a sterling-exchange standard. A reserve of 25 per cent had to be maintained against note and deposit liabilities; but this might be held in the form of gold, gold exchange, or sterling exchange (including London three-month treasury and commercial bills). If the reserve fell below this level, and the Minister of Finance did not order otherwise, the Bank was forced to pay a specified tax and to raise the rediscount rate.

The government accounts were to be transferred to the Bank, and the management of the national debt might be so transferred. The underwriting of government loans was, however, not lawful. The Bank could offer no interest on any deposit accounts within

¹⁴This is the provision of an amendment, which was passed before the Bank opened for business, and contained in the Finance Act, no. 2 of 1934, section 6. The original Act was a good deal more restrictive. Some ambiguity in both cases attached to the term "reserves"; but I am assured on good authority that it was intended to refer to the "general reserve fund" described in section 10, and not to the "reserve" against note issue defined in section 17 of the original Act.

Some other minor amendments were contained in the same Act, the most important being in section 4 which threw upon the Consolidated Fund all profits or losses which might accrue to the Bank as a result of altering the exchange rate.

New Zealand; but a limited rate might be paid upon such government accounts as it held outside the country. It was clear, therefore, that the Bank was not to conduct a savings business, such as that established by the Commonwealth Bank of Australia.

The trading banks were required to keep on deposit at the central bank amounts equal to 3 per cent of their time liabilities and 7 per cent of their sight liabilities in New Zealand. This was not a matter of grave concern to them; for their supplies of cash in the country had usually been well in excess of these amounts, and they were and are still accustomed to base their credit policies primarily upon their sterling balances rather than their local cash holdings. Indeed the associated banks, replying jointly to a parliamentary committee's questionnaire which asked whether the amount of their advances depended upon their local reserves, said, "The answer is No."¹⁵ However, despite the ineffectual grip which the newcomer obtained by holding and influencing their cash reserves, and despite its inability to compete with them, the other banks initially regarded it with some dislike. This was perhaps chiefly because of a special section of the Reserve Bank Act, which compelled them to give up their gold holdings at less than the local market price, rather than because of anything pertaining to the ordinary operations of the Bank.¹⁶ In these matters the intruder must have appeared to them to be fairly harmless.

It was under this constitution that the Reserve Bank was legally established on April 1, 1934. It began business four months later.¹⁷ For rather less than two years it continued an even tenor,¹⁸ reassuring the public that it intended no change in the exchange

¹⁵New Zealand Monetary Committee, 1934, *Minutes of Evidence*, p. 28.

¹⁶All over the world commercial banks have been forced to part with gold. In New Zealand, however, their position was such as to make the loss seem specially heavy. They were repaid only in terms of New Zealand currency, depreciated in terms of sterling and that depreciated in terms of gold. Moreover, at least one of the banks operating in both New Zealand and Australia had in 1929-30 transferred a certain amount of gold reserves to the former Dominion, apparently fearing radical legislation in the latter. It did not expect that such a well-behaved country as New Zealand would introduce drastic legislation; and the cut, being unforeseen, was all the more unkind.

¹⁷The processes involved were described by A. H. Tocker, "The Establishment of Central Banking in New Zealand" (*Economic Record*, vol. X, no. 19, Dec., 1934, pp. 222-9).

¹⁸Some minor amendments, the most important of which concerned the collection of statistics, were included in the Banking Amendment Act, no. 23 of 1935.

rate,¹⁹ but reducing the (inoperative) rediscount rate from time to time as indicative of its desire to promote monetary ease.²⁰ Then came a great constitutional metamorphosis.

*Amendment of 1936.*²¹ By this Act the Reserve Bank was allowed, indeed encouraged, to do most of the things which are frowned upon in conservative central banking circles. It was the very first piece of legislation passed by a Labour Government, flushed with victory and secure in the strength of its large, newly-elected majority. The essential object of the change was to ensure that the Bank should be the instrument of government policy. The new constitution enjoined first and foremost that "It shall be the general function of the Reserve Bank . . . to give effect as far as may be to the monetary policy of the government."²²

Forthwith the private ownership of the Bank was abolished. Shareholders were given the option of taking either cash equal to the price (£6/5/-) of their (£5) shares on the day of the Labour party's victory at the polls, or else a special issue of non-negotiable 4 per cent government stock. What the Bank lost in its capital (£0.5 millions) the Government made up to it by a (further) deposit in its reserve fund.

The directors lost all semblance of "independence." The four directorships previously to be filled by the shareholders were abolished. None of those in office were discharged; but when vacancies appeared they were filled by government appointees. The link with government finance was strengthened by allowing the Secretary of the Treasury to vote at meetings of the board.

The Bank's power to lend and invest was greatly extended. Bills endorsed on behalf of the Government were made eligible for discount and no limit was left on the proportion which agricultural bills might bear to the total. The extent to which the Bank might advance money to the Government in anticipation of revenue was doubled. Most radical of all, it was permitted to lend money,

¹⁹The first of these reassurances was published in the daily papers (e.g., *The Evening Post*) on July 19, 1934: also see the *Report of the First Ordinary Meeting*, p. 18. Actually, because the trading banks chose to fix their rates in the lower rather than the upper half of the spread announced by the Reserve Bank, the rates received and paid by the public were reduced 10/- as a result of the Bank's exchange policy.

²⁰*Report of the Board of Directors for the year ended March 31, 1936*, p. 2.

²¹Reserve Bank of New Zealand Amendment Act, no. 1 of 1936.

²²*Ibid.*, section 10.

without any specified limit, to the Government or any board or other authority with statutory power, to finance the purchase and marketing of New Zealand produce. All restrictions were removed upon the amount of its investments in securities issued or guaranteed by the Governments of New Zealand and the United Kingdom. Moreover, it was permitted to underwrite New Zealand loans. In short, the Government could legally obtain funds without limit from the Bank provided that it could obtain the sanction of Parliament and the compliance of the Bank itself.

The Bank was endowed with the most novel instrument of central banking control: the power, vested in the Governor with the consent of the Minister of Finance, to vary the proportionate reserves which the trading banks had to keep on deposit with it. As in the United States, the only country previously to introduce this device, power was given to raise the compulsory proportion, but not to reduce it below the existing level: but in contrast with the United States, no maximum for the proportion was laid down.

One provision of the Amendment Act permitted the Government to make regulations (of a nature unspecified) for the purpose of enabling the Bank to fulfil the broad functions outlined in the new legislation; and to impose fines upon those who contravened these regulations. It was necessary for all such regulations to be approved by Parliament within a given time.

The position of the Bank in regard to the exchange rate and international trade was radically altered. This was in consonance with the intention of the Government to take over the foreign marketing of the country's dairy products.²³ The export of primary products was to be managed by various boards and government departments; and it was the intention that the central bank should undertake associated financial operations. Among the general duties imposed on the Bank for this and other purposes, were those of controlling and regulating "the transfer of all moneys to or from New Zealand, and the disposal of moneys that are derived from the sale of New Zealand products and for the time being are held overseas." In order to protect the resources of the Bank for the use of the Government, the Minister of Finance was permitted to suspend, as he saw fit, the Bank's obligation to deal with the public in London funds at its published prices.

Not only the changes in the matter of foreign exchange, but the

²³Under the Primary Products Marketing Act, 1936.

whole drastic alteration of the constitution must be regarded as part of the general programme introduced by the new Labour Government. It involved, on the one hand, some extension of the sphere of government activity; and, on the other hand, an increase of the direct intervention of the Government in activities which had previously been executed by more or less "independent" boards and agencies such as the Bank directorate itself.

(4) CONCLUSION

The capital market of New Zealand, even compared with those of other Dominions, is in an immature state. To the economist and the historian its condition is full of interest; for it might well be described as adolescent. It is in a state of change, and features both of childhood and maturity are discernible. These are most evident in the security market where, on the one hand, the facilities for trading are relatively elementary and yet, on the other hand, the number of people and institutions who are interested in purchasing marketable securities is clearly increasing. Another interesting feature of the financial situation is the extent to which New Zealanders, in an attempt to maintain local institutions in the face of stronger ones operating from Australia and Great Britain, have resorted to direct government intervention.

But however interesting to the student, the New Zealand capital market is not favourable to the central banker. The security market is the only section which shows any elasticity and plasticity; and this section is influenced far more by the Melbourne stock exchange than the local Reserve Bank. The fact that the Government has actively built up the local insurance and trustee business and has supported the only large local bank has militated against competition and the accompanying sensitivity to accepted central banking operations. And although the government intervention has prevented the dominance of financial institutions from abroad and preserved some measure of local independence, financial conditions remain in a state which is practically impervious to accepted central banking techniques.

This is not to say that the existence of the Reserve Bank, even before the extension of its powers in 1936, made no difference. It withdrew influence, political as well as financial, from the trading banks. In some measure, too, it withdrew influence from the Treasury; despite the fact that the Treasury had been most active

in the battle for a central bank. The personality and English background of the Governor made themselves felt. Direct relationships between the trading banks and the Treasury diminished; and those which replaced them became less informal.

Legally and constitutionally the Amendment of 1936 transformed the Bank from a condition of orthodoxy, which under prevailing financial conditions in New Zealand was almost inevitably one of impotency, into an institution which could, in support of government policies, greatly affect the credit structure and the foreign exchange position of the country. Accepted precept enjoins that a central bank should implement its fundamental long term policies by influencing market rates of interest and the basis of bank credit; allowing the impact of its operations to be diffused outwards to the foreign exchange rate or, as the case may be, to the terms of mortgage lending. So might its influence emanate even to the marketing and borrowing business of a decentralized pastoral democracy with its market on the other side of the world. But such methods were too indirect and too uncertain for "the first socialist government to attain full power in any part of the British Empire."²⁴ Through the State Advances Corporation, reclaimed from the "independence" conferred by the previous Government,²⁵ through the appointment of directors with a more actively political turn of mind to the Bank of New Zealand, through other agencies, and not least through the reformed Reserve Bank, a less orthodox but more direct system of legal control was established.

But, in the short run at any rate, legal changes are often not nearly as important as they seem. The personnel of the Reserve Bank remains largely unchanged. The Governor retains his post and, in one of the Labour Government's appointees to the directorate, he is supported by a veritable Philip Snowden. Any Government which attempts to embark on radical and unsound policies will have at least to reason with the Reserve Bank, although it has the ultimate power of coercion. The Governor may have to retreat, but his fundamental position is unlikely to change. *Coelum non animum muant, qui trans mare currunt.*

²⁴The phrase used by the Hon. Walter Nash, Minister of Finance, Customs and Marketing, *A Year of Labour Government in New Zealand*, statement issued Dec. 1, 1936.

²⁵The Mortgage Corporation of New Zealand Act, no. 42 of 1934-5.

CHAPTER IV

THE CAPITAL MARKET AND THE BANK OF CANADA

INDUSTRIALLY and financially Canada is the most highly developed of the Dominions. This is reflected in a considerable measure of economic diversification. There are several primary industries of dominating importance in various sections of the country: wheat farming, dairying, fishing, lumbering, pulp and paper production, and mining. In addition there is a relatively large volume of manufacturing, and exports of manufactures are of increasing significance to the Dominion. This industrial diversification is chiefly responsible for the advanced state of financial development. Among the financial institutions there is a larger measure of specialization than in the other Dominions; and in the capital market there is generally more competition. The reliance on marketable securities as a form of raising funds, the extent to which family and private enterprises have been refinanced as public concerns, is probably greater than elsewhere. Financial institutions are less dependent upon sources of funds and sources of liquidity outside the country; and in the nineteen-thirties capital amounting to nearly \$1,000 millions¹ has been exported, chiefly in the form of repayment of debt.

A special feature of Canadian economic development has been that, while other Dominions have had a single focus abroad for their commercial and financial activities, this Dominion has had two. Its economic relationships with Great Britain have been surpassed by those with the United States. Institutionally and socially the American influence has been strong. Moreover, the very fact that external relationships have been with two countries instead of one has probably hastened the independence of certain financial and economic activities within the country. The independent course followed by the Canadian exchange rate at times

¹Throughout this book the context will indicate whether Canadian or American dollars are intended.

when the relationship between the American dollar and the pound sterling has been unstable is at once an indication and a cause of independence.

(1) FINANCIAL INSTITUTIONS*

Commercial Banks. Canadian banks, like those in the other Dominions, have been organized on British lines and carry on branch banking business of the kind described in previous chapters. The most distinctive feature of the Canadian system is the relatively small extent to which the Canadian banks engage in agricultural finance. They have customarily left the field of long and intermediate credit in rural districts almost entirely to other financial institutions, and have themselves provided little but the seasonal needs of their rural clients. The Canadian Bank Act has prohibited mortgage lending since it was first passed (1871) soon after Canadian confederation. The banks have also been unwilling to lend on long

DISTRIBUTION OF THE LOANS IN CANADA OF THE CANADIAN CHARTERED BANKS *
October 31, 1938

	\$000,000
Provincial Governments.....	22.8
Municipal Governments and school districts.....	114.5
Farmers, cattle and fruit raisers.....	56.8
Grain dealers.....	91.7
Financial brokers and dealers.....	62.4
Other financial institutions.....	66.9
Individuals borrowing against securities.....	120.5
Merchandising, wholesale and retail firms.....	133.7
Manufacturers and dealers in lumber, pulpwood, etc.....	75.2
Other manufacturers of all descriptions.....	138.4
Mining.....	8.9
Fishing, including packers and curers.....	8.7
Public utilities.....	24.9
Building contractors and other borrowers for building.....	39.2
Churches, hospitals, and religious institutions.....	19.4
Other loans.....	74.7
	<hr/>
	1,058.7

*Annual return to the Department of Finance, reproduced in the *Statistical Summary of the Bank of Canada*, Jan., 1939, p. 3.

*See the *Report of the Royal Commission on Banking and Currency in Canada, 1933* (King's Printer, Ottawa); also B. H. Beckhart, "The Banking System of Canada" (*Foreign Banking Systems*, New York, 1929, chap. v); also E. L. Stewart Patterson, *Canadian Banking* (Toronto, 1932).

term to commercial and industrial undertakings; although in this field they are likely to assist in the early stages of capital extensions, pending the raising of funds from the public by security issues, and this has given them an influential position in regard to the development of Canadian commerce and industry. A table on page 124 shows the way in which the banks have distributed their loans.

The unwillingness or inability of the Canadian banks to engage in long term lending has forced borrowers who wished to raise funds on these terms in Canada to rely more on security markets than they otherwise might have done: and, as it has turned out, it has ultimately forced the banks themselves into a large measure of security purchasing. In 1935 the banks' security holdings overtook their commercial loans, and since then they have continued to forge ahead.³ The chief assets and liabilities of the Canadian banks are given in an accompanying table.

CHIEF ASSETS AND LIABILITIES OF CANADIAN CHARTERED BANKS, 1938*

	<i>Liabilities</i>	\$000,000
Notes.....	100	
Deposits, total.....	2,892	
Demand in Canada.....	690	
Time in Canada.....	1,630	
Dominion and provincial.....	94	
Abroad.....	408	
 <i>Assets</i>		
Bank of Canada notes and deposits.....	252	
Securities, total.....	1,440	
Dominion and provincial short†.....	447	
Dominion and provincial long.....	696	
Other.....	297	
Loans in Canada, total.....	982	
Call loans.....	67	
Current loans to the public.....	786	
Other current loans.....	129	
Loans abroad, total.....	209	
Call loans.....	51	
Current loans.....	158	

*Average of twelve end-of-month returns reproduced from the *Statistical Summary of the Bank of Canada*, Jan., 1939, p. 5.

†Maturing within two years.

³For an outline of the course of events see chap. IX, section (2).

The savings deposits of the Canadian banks deserve special comment. The chartered banks, that is the banks with charters under the Bank Act, do far the greatest part of the savings bank business; except perhaps in the French-Canadian province of Quebec where two banks, operating under a special and somewhat similar Act,⁴ and various other local institutions, hold a large number of savings accounts. It has for long been customary for the chartered banks to allow limited chequing facilities to savings depositors despite the fact that, legally, savings deposits are only payable after some ten days' or a fortnight's notice. Thus the greater part of the personal chequing accounts of the country are to be found amongst the chartered banks' savings deposits, as well as most of the country's savings accounts proper.

Compared with those in other Dominions the Canadian banks seem to hold excessive amounts of securities. But the comparison must not be made without consideration of the large savings business done by the commercial banks in Canada. If it were possible to know how great a volume of their accounts was properly considered as savings bank business, it would be possible to consider an appropriate portion of their investments in securities as assets properly attributable to this business; and then to discover how large a residue of securities was held on account of their commercial banking business. Reasonable comparisons between the security holdings of banks in Canada and the other Dominions might then be made. But the statistical information available does not permit these comparisons.

There are ten chartered banks. In 1937 they operated 3,336 branches and agencies in Canada. Their total assets, at home and abroad, amounted to \$3,317 millions. Of this, \$2,359 millions were controlled by the three largest. The head offices of all the banks are in Canada; and in the case of only one of them, and that the smallest—Barclay's Bank (Canada)—, is external control important. Two of the smaller chartered banks are French-Canadian and operate chiefly in Quebec. Some of the larger banks conduct a considerable business outside Canada: in Newfoundland, the West Indies, South America, and elsewhere. At the end of 1937 two banks had 117 branches abroad; and four others had 26. Until the nineteen-thirties Canadian banks used to carry, as secondary

⁴The Quebec Savings Banks Act (R.S.C., 1927), chap. 14.

reserves, considerable amounts on call or short notice in New York and lesser amounts in London; but recently their assets outside Canada have only just about covered their outside liabilities.⁵

The banks take common action through the Canadian Bankers' Association, incorporated in 1900 under a special Act of Parliament. Among its functions, some of which are laid down in the Bank Act, have been supervision of the banks' note issues, of central gold reserves and clearing houses, and of banks in receivership. Some of these functions have been curtailed with the introduction of central banking. The Association has, during the nineteen-thirties, become the medium through which changes in rates of interest on deposits are arranged. It has also taken up the matter of charges for the operation of accounts; charges which have been increased and extended as the chief assets of the banks changed from commercial loans with relatively high yields to government securities with relatively low ones.

*Insurance Companies.*⁶ In 1937 life insurance business in Canada was transacted by 41 companies, 28 of them Canadian, 5 British, and 8 from other countries. At the end of the year the total assets of Canadian companies, at home and abroad, amounted to \$2,138 millions, of which one company (the Sun Life Assurance Company) controlled \$831 millions. The assets in Canada (in the previous year) of British companies amounted to \$71 millions and of foreign companies to \$506 millions. The chief assets of Canadian companies are given in a table on page 128. Several of the companies carry on a considerable business outside the country; indeed the Sun Life operates throughout North and South America, in Great Britain, South Africa, and a number of Asiatic centres. During the nineteen-thirties the custom grew up of keeping reserves in each currency roughly proportioned to the liabilities in it. More than one-third of the total business of Canadian companies is carried on outside the country.

An accompanying table indicates how far Canadian insurance companies have taken up marketable securities. In this they have been led by the Sun Life, which has invested heavily in stocks as well as bonds and debentures of all sorts. The other companies, more conservatively managed, have done a proportionately larger

⁵Further details may be found in chap. xviii, section (2).

⁶Report of the Superintendent of Insurance for 1937 (King's Printer, Ottawa).

business in mortgage lending. Until the end of the nineteen-twenties they were still extending their rural mortgages, but with the catastrophic droughts in the Prairie Provinces, low prices, a variety of moratoria legislation throughout the country, and confiscatory legislation in the Province of Alberta, the flow has all but ceased. A certain amount of urban mortgage business has been resumed, however; part of it under the Dominion Housing Act and other governmental schemes.

CHIEF ASSETS OF CANADIAN LIFE INSURANCE COMPANIES*

December 31, 1937

	\$1000,000	Per cent of total
Mortgage loans.....	298	14.0†
Government bonds (Canadian and other).....	544	25.5
Municipal bonds (ditto)	187	8.7
Other bonds (ditto)	323	15.0
Stocks (ditto)	315	14.7†
Cash.....	40	1.9
Policy loans.....	260	12.1
		91.9

*From the *Report of the Superintendent of Insurance, 1937*, table on p. xxxvi. No distinction is made between the assets of Canadian companies held at home and abroad.

†In some places these figures are misleading because the Sun Life, with far the largest business, invests on different principles from the remainder. For instance, its mortgage loans were 3.9 per cent of its assets, and all the others' were 20.4 per cent. On the other hand, its holdings of stocks were 31.6 per cent of its assets, while the others' were 4.0 per cent. See the table in the Superintendent's *Report* already referred to.

Policy loans occupy a place of importance amongst the companies' assets. The trend of these loans shows that, contrary to South African practice, they do not serve to any great extent in financing speculation. On the contrary, policy loans seem to swell in bad times, indicating that they provide for emergency borrowings or that the holders are intending to let their policies lapse. It is significant that a motion to limit rates of interest on policy loans to 4 per cent was presented in Parliament in 1935 by Mr. G. G. Coote, member of a radical group which would represent the wants of needy borrowers rather than opulent speculators. He withdrew

his motion on the understanding that the companies would voluntarily limit their rate to 6 per cent.⁷ Nearly half the policy loans outstanding at that time were at rates which would be affected even by this reduction.

Trust and Loan Companies. These companies have supplied, amongst other needs, a large part of the country's requirements for long term mortgage money. In earlier days, operating chiefly on their own capital, some of them played an important role in directing land settlement. They gradually came to use borrowed funds, raised by debentures and deposits, more than their own; and even these two sources have not supplied one-tenth of the amounts which are nowadays administered by the trust companies as estates, etc. The way in which the companies have distributed the funds at their disposal is roughly indicated in the accompanying table. A significant feature is the very large holdings of marketable securities, most of which are included in the residual figure for "Other Assets."

CHIEF ASSETS OF TRUST AND LOAN COMPANIES IN CANADA*

December 31, 1936

	Company and guaranteed funds	Estates, trusts, etc.
	\$000,000	\$000,000
Dominion and provincial bonds.....	23.2	350.7
Mortgages.....	99.3	165.2
Cash	10.6	51.1
Other assets (including other bonds, stocks, real estate, etc.).....	101.9	1,962.9
	235.0	2,530.0

**Canada Year Book*, 1938, p. 934. Statistics regarding these companies are not yet very satisfactory because the greater number of them operate under the jurisdiction of the various provinces.

Land and Agricultural Banks. There are no financial institutions in Canada which can properly be brought under this heading, except perhaps the Caisses Populaires and the Ontario Government Savings Office described below. The provincial Governments have established farm loan schemes from time to time, some of which

⁷*Report of the Superintendent of Insurance*, 1935, p. lxiii.

have fallen on evil days. A sketch of their activities is contained in the *Report of the Royal Commission on Banking and Currency in Canada, 1933*. The Canadian Farm Loan Board was established in 1929 and was expected largely to supersede the provincial agencies. Since that date, however, there has been very little demand for long term agricultural credit; at least very little that offered a reasonably good risk. The condition of agricultural indebtedness has remained chronically unsatisfactory, especially in the Prairie Provinces where drought prevailed through most of the nineteen-thirties.

Savings Banks. The great majority of savings deposits are in the chartered banks, but some are to be found in other institutions, some commercial, some co-operative, and some run by Governments. The extent of these deposits is shown in an accompanying table.

DEPOSITS IN VARIOUS CANADIAN SAVINGS INSTITUTIONS: 1937*

	\$000,000
Dominion Post Office Savings Bank.....	22.6
Ontario Savings Office.....	40.3
Alberta savings certificates.....	4.1
Two Quebec savings banks.....	75.1
Caisse Populaire.....	13.1
Loan companies.....	33.8
Trust companies.....	50.3
<hr/>	
	239.3

*From the *Statistical Summary of the Bank of Canada*, May, 1939, p. 74. The table presented there is rather more detailed than this one. The figures for each institution are for its fiscal year ending nearest to December 31, 1937.

These depositories disposed of their funds in the following manner. Deposits in the Post Office Savings Bank have been merged into the consolidated fund and made available for the general purposes of the Dominion Government. The funds of the Ontario Savings Office have been devoted almost exclusively to finance farm loans. The proceeds of Alberta savings certificates have been available for the general use of the provincial Government. The two Quebec savings banks, like the chartered banks, have not been permitted to lend money on mortgage and have invested the greater part of their funds in securities, Dominion,

provincial, and municipal. The Caisse Populaires are co-operative credit institutions operating in both rural and urban sections of the Province of Quebec. They have lent partly on mortgage and partly on promissory note to their members, and have invested perhaps a third of their funds in bonds.

(2) THE CAPITAL MARKET

The Canadian capital market is the broadest and best developed of the four under consideration in this book. The variety of marketable securities is probably the greatest; the facilities are most efficient; and, with the possible exception of the South African market for mining stocks, the competition is probably most active. Moreover, Canada is the only Dominion in which there is an entirely open competitive market in foreign exchange, unrestricted by published rates.

These considerations suggest that the Canadian market must be the most susceptible to central banking control; and in this conclusion there is a large measure of truth. Yet in some ways monetary control in Canada is more difficult than in any of the other three countries. For this there are three causes; first, the oversea trade and finance of the other Dominions are focussed upon a single country, while Canadian interests are divided in a most complex fashion between Great Britain and the United States; second, the other Dominions are relatively remote and isolated, whereas Canada is much closer to Europe and the United States and is thus far more subject to outside influences; and third, certain provisions of Canada's foreign borrowing have created a nexus, between the Canadian capital market and those of the United States and Great Britain, which has no counterpart in the markets of the other Dominions. Accordingly the following account of the Canadian market must both indicate its comparative breadth, and also draw attention to special factors which militate against control.

*Bond Market.*⁸ The first section of the capital market to be described is the bond market. This is of special importance in Canada; for not only have Canadian Governments had recourse

⁸See the *Report of the Royal Commission on Banking and Currency in Canada, 1933*, pp. 27, 45, 76. I am also indebted to the papers and discussions of the Monetary Group of the Toronto Branch of the Canadian Institute of International Affairs during the winter of 1935-6.

to it, but also a great many Canadian industrialists. Enterprises that in other Dominions would have obtained funds by the issue of stock have in Canada sold bonds. The outstanding examples of this have been in the newsprint industry in the years from 1924 to 1930; and their subsequent history has been a warning that it takes more than the printed words to transform what is in essence an "equity" into a so-called "first mortgage gold bond."

There is considerable variety in the securities traded on the bond market. There are the issues of the Dominion and the Government-guaranteed Canadian National Railways, the issues of the nine provinces and various bodies created by them, the issues of cities and towns and other municipalities, and the issues of a large number of private corporations. In all these groups there is usually active trading. At times sections of the bond market, where the edges are least gilt and most raw, become centres of such speculative interest as may more often be found associated with markets in common stocks.

Nowadays, and this is especially true since 1929, the greater part of the issues of Canadian bonds finds its way into the portfolios of the large "institutional investors." There follows a list of these, together with an indication of the size of their holdings. In addition to these there are a large number of other corporate investors, engaged in industrial as well as financial pursuits, and also the wealthier members of the community. Lastly, there are the sinking funds of the provinces and municipalities, buying sometimes their own issues but more often those of each other and the Dominion Government. The importance of sinking funds is declining because provinces and municipalities are increasingly persuaded, chiefly by institutional investors, to issue serial or instalment bonds in which capital repayments run concurrently with interest payments.

Unlike the large institutional investors, whose primary business is in commercial banking, insurance, or some other pursuit, there are certain firms which engage chiefly or solely in buying and selling bonds. These used to be called "Investment Bankers," a species which ranges throughout North America; but partly on account of some jealousy over the use of the term "bank" which is legally restricted to the chartered banks, they are now known in Canada as investment or bond dealers. There were in 1937 some 135

BONDS AND DEBENTURES HELD BY CANADIAN INSTITUTIONAL INVESTORS, 1937*

	Dominion and provincial			
	Government \$000,000	Other \$000,000	Total \$000,000	
Bank of Canada.....	174	12	186	
Chartered banks.....	1,111	301	1,411	
Life insurance companies (Canadian only).....				1,054
Trust and loan companies (including administered funds).....	374	†	†	
Sinking funds of provinces and municipali- ties				457

*Figures from various sources already mentioned. They are for December 31, 1937, except in the case of trust and loan companies where figures are for the previous year. They cover foreign operations of the various institutions.

†Bond holdings of trust and loan companies probably exceed \$1,000 millions, but cannot be estimated precisely from published statistics.

individual firms which were members of the Canadian Investment Dealers' Association, most of them with their head offices in Montreal or Toronto. There were a large number of branch offices scattered across the country, and three or four firms were of outstanding size. There is a whole hierarchy of them, as will be the case in any fairly well-developed market; some dealing in high grade securities only and achieving a social superiority over those who dabble more freely in dubious issues. A few houses act as brokers only, buying and selling in the market according to their customers' orders; but most of them, including all the more important, usually act also as dealers, buying for and selling from their own inventories. With the lowered bond yields and diminished turnover of recent years it has become less profitable to hold inventories, and many dealers have temporarily ceased to do so.

In Canada bonds are not bought and sold on any central exchanges; and therefore there are no prices established publicly although price lists of some standard issues are published by the Canadian Investment Dealers' Association after each day's trading. The need for exchanges has been a matter of some controversy in recent years. Nevertheless, in their absence the competition is very keen between the various dealers, and between many of the

institutional investors who are also active traders, always on the alert to pick up bargains or to make sales from their portfolios at profitable prices. The various operators have a highly developed mechanism of telephonic and telegraphic communication with each other which extends between the various Canadian centres (notably Montreal, Toronto, Winnipeg, and Vancouver), and into various important markets in the United States.

There are two factors which result in a special dependence of the Canadian bond market upon those of the United States and Great Britain. These impede independent Canadian control of the local situation. The first is proximity. The leaders of Canadian finance can pay frequent visits to the other countries. Montreal and Toronto are an over-night journey from New York, Chicago, Boston, Philadelphia, or Washington. The Atlantic crossing is only a few days; and, with the newly instituted air service, is hardly a day. The outlook of the Canadian market is thus coloured by opinion in the larger centres. The influence of the United States is intensified by investment services, the radio, and the press, all of which media carry across the border masses of American opinion upon contemporary events.⁹

There is another factor of even more direct influence. This is the movement between countries of Canada's "optional-payment bonds."¹⁰ These are securities which are payable, interest and principal, in more than one currency at the option of the owner. The issue of these securities became popular soon after the War and was at first connected with the danger of exchange rate fluctuations. In the later nineteen-twenties it was continued,

⁹See R. B. Bryce, "The Effects on Canada of Industrial Fluctuations in the United States" (*Canadian Journal of Economics and Political Science*, vol. V, no. 3, Aug., 1939, p. 373); also J. D. Gibson and A. F. W. Plumptre, "The Economic Effects on Canada of the Recent Monetary Policy of the U.S.A." (*Canadian Papers Submitted to the Yosemite Conference of the Institute of Pacific Relations, 1936*, vol. I, Canadian Institute of International Affairs, Toronto, mimeographed); also *Proceedings of the Conferences on Canadian-American Affairs*, 1935 and 1937, published for the Carnegie Endowment for International Peace by Ginn and Co., New York and Montreal.

¹⁰W. T. G. Hackett, "Canada's Optional Payment Bonds" (*Canadian Journal of Economics and Political Science*, vol. I, no. 2, May, 1935, pp. 161-70); also *The Canadian Balance of Payments, a Study of Methods and Results* (Dominion Bureau of Statistics, Ottawa, 1939), chap. xviii.

partly because of habit and partly because it was believed to give the issues a slightly broader market and thus bring to the borrower the benefit of a slightly reduced interest rate. The risk of having to service the debt in the currency with the highest exchange value was held to be of little account in those new-era days; but in 1931 the risk became a reality.

PAYMENT FEATURES OF ALL CANADIAN BONDED DEBT*

1935

Payable at the holder's option in	Per cent
Canada, London, or New York.....	16
Canada or New York.....	17
New York only.....	7
Canada or London.....	4
London only.....	12
Canada only.....	44
	—
	100

*Roughly estimated by W. T. G. Hackett, "Canada's Optional Payment Bonds" (*Canadian Journal of Economics and Political Science*, vol. I, May, 1935), and including government, municipal, and corporate debts. Between 1935 and 1939 a considerable amount of optional payment bonds was retired. One or two new issues appeared in 1938-9, after a period of several years' exchange stability.

Tables on this page and the next show the payment features of Canadian debt. It must not be assumed that the debt is necessarily held in the country whose currency is required in payment. Much debt, optionally payable abroad, is held in Canada; some debt, payable in Canada only, is held in the United States. It will be appreciated that the extent to which Canadian debt is payable in more than one currency is unique.¹¹

The free movement of optional-payment bonds across the

¹¹One other instance, and a very minor one, can be found among the Dominions of securities payable in two markets. Before the formation of the Union of South Africa in 1910, Cape Colony had issued £34 millions of stock which was payable in "pounds." Most of this was registered in London but some in South Africa. After the War, when the South African pound appreciated above sterling, there were a certain number of transfers of the stock to South Africa: but not many because (according to the Under-secretary of Finance in 1925) "the stock is held by a large number of people in England as an investment. It is very difficult to get the stock unless you are prepared to bid up the price." See the *Evidence before the (Kemmerer-Vissering) Commission on the Resumption of Gold Payments*, U. G. no. 13, '25; qq., 3122-42.

American border and across the Atlantic exercises its influence in two fields; in the foreign exchange market and the bond market. The former will be treated in due course. The effect on the bond market, at times when the exchange rate is fairly stable in the vicinity of parity, is to keep the prices and yields of Canadian securities, at home and abroad, fairly close to the prices and yields of comparable securities on markets abroad. At times when the exchange rate is fluctuating, the complexity of the situation increases. Prices and yields of these securities alter, at home and abroad, partly due to the direct influence of the exchange movement

PAYMENT FEATURES OF CANADIAN GOVERNMENT BONDED DEBT*

June 30, 1938

\$000,000

	Payable in					
	Canada only	New York only	Canada or New York	Canada, New York, or London	London†	Total
Dominion Government: direct and guaranteed	2,601.8	473.2	65.7	380.0	697.6	4,218.3
Provincial Governments: direct and guaranteed.....	846.4	9.1	398.3	314.8	174.3	2,742.9

*Figures compiled from the *Statistical Summary of the Bank of Canada*, July, 1938, p. 111.

†Figures in this column cover London-only and London-or-Canada payments and also one issue payable in London or Paris.

and partly under the influence of the alterations of expectations which surround the movement. The working of these two groups of influences may be described briefly. They affect the transfer of securities between the two (or three) centres as well as prices and yields.

The direct influence of an exchange movement upon the prices of optional-payment securities is to raise them in the country where the currency is depreciating, or to lower them in the country where the currency is appreciating, or both; after the fashion of the prices of a commodity with free, sensitive markets in both

countries. The spreading of prices, resulting from these opposite price movements in the two countries, will tend, since trading in the securities is keen and sensitive, to be proportionate to the exchange movement. Otherwise arbitrage would persist. There is also likely to be some transfer of the securities involved. This will be an export from the depreciating to the appreciating country; again after the fashion of a sensitively traded commodity. The movement will be the result of existing holders, in the depreciating country, being willing to sell out at increased prices; and investors, in the appreciating country, being willing to buy in at reduced prices.

So much for what may be called the direct reactions of the bond markets to an exchange movement. On the other hand, opposing forces may be at work; and these are not unlikely, in the case of spectacular movements involving extensive changes of market opinion, to be the dominant ones. In the first place, there is an incentive, in the depreciating country, to hold on to the securities because, since they are optionally payable in an appreciated foreign currency, the expected yield will have risen.¹² In the second place, the very fact that exchange rates are on the move may enhance the value set by one market or another upon these securities; because, payable in two or three currencies, they provide a type of hedge against exchange rate movements. The increased desire for such a hedge is likely to be greater in the depreciating country. In the third place, one depreciation may be expected to foretell another; in which case the direct reactions towards holding and selling, described at the end of the last paragraph, may be delayed or even reversed. In the fourth place, and still more important, substantial movements in exchange rates are usually accompanied by altered estimations of the credit standing of borrowers, both public and private. In the depreciating country, all borrowers with debts abroad will have to pay more for foreign exchange, and other more fundamental factors may at the same time do further damage to their credit. Thus, while the direct influence of an exchange movement may be to make investors in the appreciating country more willing to buy and hold, the reverse may well happen if (as is likely) the depreciating country is the

¹²Except in so far as the Government is expected to tax this windfall gain, as the Canadian Government did following 1931.

debtor. In this case depreciation may cause selling from abroad into the market of the depreciating country. The local market, so far from rising, will fall. If so, it will be accompanied by an even more drastic fall in the prices of these optional-payment bonds abroad: for the price-spreading already described will inevitably develop, if necessary as a result of arbitrage.

It must be clear, in conclusion, that the Canadian bond market is not so susceptible to central banking control as it might seem at first sight. It does, indeed, appear a fairly well-developed market when comparison is made with the other Dominions. But the proximity of London, and the even greater proximity of New York, combined with the influence of dealings in optional payment bonds, exert independent and often unpredictable influences of great weight. The financial ties that bind Canada to the United States are particularly strong. It is no meaningless jest to say that "Canada is the thirteenth of the American Federal Reserve Districts."

*Stock Market.*¹³ There are six stock exchanges in Canada: one in each of Toronto, Winnipeg, Calgary, and Vancouver, and two in Montreal. In recent years the Toronto exchange has done the most business, exceeding that in Montreal. Indeed it has become one of the most active exchanges on the continent. At times it turns over a larger number of shares than any other; although the value of shares traded may only amount to about one-twentieth of that in New York and may also be substantially less than in Chicago. (Comparisons on this basis cannot be made with the other Dominions because, following British custom, information regarding volume and value of turnover is not made public.) There were, all told in 1937, some 1,600 registered brokers dealing in shares; but only about 350 had seats on the various exchanges. An appreciable amount of trading is carried on by the non-members, but much of it, perhaps most, is put by them into the hands of members and thus eventually goes through the exchanges. A further amount of business is transacted in stocks which for one reason or another are not listed on the exchanges.

The business of the stock markets falls into two main groups, industrial shares and mining shares; and within these groups there

¹³For the material in this section I was chiefly indebted to the discussion group mentioned above.

are many smaller classifications. (To this the Calgary market, which is concerned almost entirely with oil shares, is an exception.) The market in industrial shares needs no special description, being sufficiently like those which may be found in other Dominions and elsewhere. The market in mining stocks deserves special comment.

Like mining exchanges in other parts of the world, the Canadian market is volatile; and the more so because of the irregular geological formations (in sharp contrast with those of the Witwatersrand) from which most Canadian gold is extracted. In general, the Canadian mining market is less orderly than that in Johannesburg. The exploitation of Canadian minerals is gradually falling into the hands of about a dozen groups, similar to those which dominate South African development; but the process is by no means complete. For the most part Canadian issues are put on the market with less responsibility. This may be inevitable on account of the greater irregularity of the ore bodies and the greater uncertainties involved in their exploitation. But whatever may be the cause, the sale of new issues of mining shares in Canada is commonly accomplished by the process known as "taking options." The details of this method need not be reproduced; suffice it to say that it requires a rising market for success. The public is accustomed to buying new issues only at rising prices, hoping for a quick profit, rather than at what appears to be a low price and a good prospect for dividends. (Good dividend prospects are essentially an attribute of regular ore bodies and predictable development.) Accordingly, as far as they can, the issuing brokers will regulate the price to secure the desired result. It would be practically impossible to secure public subscription to mining shares in Canada, or the United States whence this technique of issue was learned, at a time when the market was stationary; let alone falling. This is not to say that no funds would be devoted to development and exploration; but they would represent money which accrued within the industry rather than obtained through the public marketing of securities.

Like the bond market, the Canadian stock market is susceptible to foreign influence. Proximity to the United States exercises a similar influence in shaping the course of prices. Moreover, there are many "interlisted" shares which are traded outside Canada as

well as inside. It has been roughly guessed that about one-fifth of the mining issues listed in Canada are also traded on American markets and that American holdings account for some 40 per cent of Canadian mining shares. In the case of industrial shares the interlisting is with England and other countries as well as with the United States; but the proportion of interlisted shares on the Canadian boards is a good deal lower, perhaps about one-twentieth. Nevertheless, in both mining and industrial shares it is the inter-listed issues which are the most important and which often set the tone for the rest of the market. Canadian stock market averages can diverge from those elsewhere (and, indeed, from each other), because they are not based upon precisely the same data; and even at times, perhaps particularly the summer season of slack trading, it may be possible for the local market really to get appreciably "out of line." But arbitrage, which is in constant use, must correct this quite rapidly. We must conclude that the Canadian stock market is, on the whole, very sensitive to influences from abroad. Indeed, the international trading in stocks usually far exceeds the international trading in optional-payment bonds.

A new method of checking stock exchange speculation has been introduced by the federal authorities in the United States; i.e., an increase of the margins which must be put up in cash by speculative purchasers of securities. This measure has had its counterpart in Canada. In 1936 the leading stock exchanges increased the margin requirements to be stipulated by their members. About the same time Canadian banks required increased margins from their clients, whether individual speculators or financial houses. The action of the exchanges at a time when speculation might have been getting out of hand, received a favourable comment from the Governor of the Bank of Canada in his next annual speech; indeed it is generally understood that the central bank took initiative in the matter.¹⁴

Bill Market and Short Term Lending. The first issue of treasury bills by public tender was made in March, 1934. By the time the Bank of Canada opened for business, just one year later, the method was established and accepted, the volume of bills being

¹⁴See J. S. Allely, "The Stock Market and Depression" (*Canadian Banker*, vol. XLVI, 1939, p. 164); also *Report of the General Meeting of the Bank of Canada*, 1937, p. 16.

then about \$37 millions. By the end of 1936 it had reached \$150 millions, in which vicinity it has stayed for the next two and a half years. The rate, originally 2.85 per cent, and 2.05 when the Bank opened, fell below 1 per cent early in 1936 and even below $\frac{1}{2}$ per cent for a short time in 1938. The introduction of treasury bills is described in some detail in Chapter XIII, sections (3) and (4). Suffice it to say here that the bills have been held chiefly by the banks, the Bank of Canada being the largest single holder. A certain amount of foreign money has been invested in them. No market, however, has developed; the original purchasers normally hold them until maturity.

The market for high grade bonds of fairly short and intermediate terms has developed considerably in recent years. The chief single cause for this has been the heavy purchases which the banks have been impelled to make during the depression and revival following 1929. Early in the period these purchases were chiefly of securities maturing within three or four years, a type of bond which the banks were accustomed to consider among their more liquid assets; but later, impelled by the growing spread between the yields, they bought issues of rather longer term. The increased demand, by the banks and others, for short and medium term securities, which was reflected in the low rates payable upon them, has induced the Dominion Government and other borrowers to float suitable issues, and has stimulated all borrowers to pay strict attention to the maturity dates of their offerings. Low rates are politically as well as financially advantageous; and some Governments, in attempting to gain them, have issued considerable quantities of short term obligations.

Bills are used to some extent in the Canadian financial system to finance trade.¹⁵ They are discounted by the banks; and in regard to some export bills, notably those to finance wheat, there is American competition. Some sterling bills are held until maturity, others sold in London soon after they are received. Bills drawn on American points are usually, like local bills, held until maturity. There is no market in Canada, no active buying and selling of bills of any character.

Call loans to the security markets are for the most part made

¹⁵See G. F. Towers, *Financing Foreign Trade* (Royal Bank of Canada, Montreal, 1927).

by the banks and, to a less extent, by the trust companies; and other lenders participate from time to time. There is no free market and the rates are reached by arrangement. Most of the security houses are almost entirely dependent upon these loans to carry on their business. It would usually be embarrassing for a borrower if a bank wished to cut down its loans; and the right to call them in is seldom exercised suddenly. The banks have maintained relatively high call loan rates, which have fallen only slightly to 4 and 5 per cent, during recent years when call money could be secured at an almost nominal price in the United States. Canadian borrowers sometimes break away to American sources in order to secure the benefit of low rates; but some of them have been found wanting by foreign creditors less paternalistic than the Canadian banks and have come to grief. For the most part the Canadian financial houses are satisfied to pay what seem high rates in the slack times in return for the privilege of borrowing at much the same rates in times of stringency, and for freedom from the trouble and expense of shopping around for money which is lent upon the impersonal basis of a free call market.

Short term loans to agriculture, industry, and commerce are made by the banks. They do not publish their rates; each commercial loan being, ostensibly at least, a matter for separate arrangement. However, it is well known that certain rates prevail for certain types of business and some information has become available. It indicates that, for many years and possibly since their earliest days, the banks maintained very stable rates upon their loans; but, since 1930, there has been some decline.¹⁶ The decrease has been explicit in the case of loans to certain public bodies and to farmers. In the case of commercial enterprises the banks claim to have made reductions "in deserving cases"; and their critics suspect that the most "deserving" have been those into which cheap American money was finding its way.¹⁷

¹⁶See S. E. Nixon, "The Course of Interest Rates in Canada, 1929-1937" (*Canadian Journal of Economics and Political Science*, vol. III, no. 3, Aug., 1937, p. 421).

¹⁷E.g., "A year ago the Canadian banks were faced with stiff competition from the United States on certain grain loans; funds being offered at 3% and less, in comparison with the then 'standard' Canadian rate of 5½%" (*Financial Post*, Toronto, Dec. 5, 1936, p. 17). In the subsequent reductions of Canadian rates, the account continues, the least were at country points; and the most were on

Another source of short term credit is the Canadian life insurance companies. The nature and extent of their policy loans have already been described. Interest rates on these loans are usually subject to contractual agreements in the policies and are therefore immobile.

The chartered banks hold nine-tenths or more of all deposits. The familiar line between savings deposits and current accounts is blurred in Canada because the banks allow individuals to draw a few cheques every month upon the former. Interest is paid at a published rate on minimum quarterly balances retained in savings accounts; and usually, by arrangement, on large balances held otherwise. For deposits, as for commercial loans, a very long tradition of stable rates has been recently broken. The general downward movement of the rate on savings deposits was initiated as part of a cheap-money movement by the federal Department of Finance shortly before the establishment of the Bank of Canada.

*Foreign Exchange Market.*¹⁸ In Canada, unlike other Dominions, competition for foreign exchange is not confined within the spread of rates published by the commercial banks or the Bank of Canada. Most business goes into the commercial banking system through its widespread system of branches: although the central bank and some of the largest commercial and financial concerns deal directly with foreign markets. Many of the ordinary demands can be offset and satisfied within the foreign exchange department of any one of the bigger banks. For the rest, the banks buy and sell between themselves, always doing business through foreign exchange brokers, three in Toronto and four in Montreal, and also dealing in the markets of New York, London, and elsewhere. Transactions, in spot and future exchange, are made by telephone and telegraph, and the rates established are very sensitive. The banks did at least once make an attempt to determine jointly the spreads between the buying and selling rates which they would quote to

large loans at terminal points where, of course, American competition would be most keen. See also *Financial Post* (Toronto, April 24, 1937), p. 21.

¹⁸See the *Report of the Royal Commission on Banking and Currency in Canada, 1933*, pp. 34-5; also R. E. Knight, Proceedings of the same Royal Commission (mimeographed), volume of addenda, pp. 68-106j; also H. D. Scott, "Control of Foreign Exchange Rates" (*The Canadian Economy and Its Problems*, Toronto, 1934, pp. 246-67); also Towers, *Financing Foreign Trade*.

their ordinary customers at the branches; but the effort to reach agreement was apparently unsuccessful.¹⁹

The hub of the market appears to be the dealings in Canada between the banks themselves. It is here that independent competitive exchange rates are reached between the Canadian and American dollars. The American dealers in Canadian dollars for the most part follow closely the rates which are being quoted by the Canadian banks. The exchange rates between the Canadian dollar and the pound sterling are usually quoted by the banks at a figure calculated from the Canada-New York rates and the New York-London rates. Because the Canada-London rates are calculated on this indirect basis, instead of being reached by direct operations as might be expected *prima facie*, there is seldom any opportunity for arbitrage between the three centres. In London the market for Canadian funds is relatively narrow; especially early in each day's operations before the Canadian banks open (five hours later) and before the new day's business establishes new rates between Canadian and American funds.

The bulk of the Canadian banks' exchange dealings abroad are transacted with New York, where the market is open for the same hours of the day. At seasons of the year when there is a great excess of sterling funds being sold to the banks, for instance when wheat is being shipped to Great Britain, sterling bills or cables will be sold in New York. In that centre, too, it is possible to sell or obtain the funds of European and other countries; but the Canadian banks' dealings in these funds have, in the past few years, gravitated towards London.

An examination of factors affecting the Canadian exchange market is undertaken in Chapter XVIII, section (2). Special attention is given to the effects of international dealings in securities and to the movement of the funds of the many American branch plants which have been established in the country. Generally, when confidence is undisturbed and the exchange rate near parity, the effect of these capital movements is to impart a remarkable degree of stability to the rate: but if confidence is disturbed capital movements may be very unsettling to the exchange market. Another special matter to be taken up in the same chapter is the relationship which should normally exist between a minor currency,

¹⁹Knight, Proceedings of Royal Commission, pp. 83-4.

the Canadian dollar, and the two major currencies with which it is chiefly associated.

(3) THE BANK OF CANADA

*Original Constitution.*²⁰ It was on March 11, 1935, that the Bank of Canada opened for business. The constitution under which it began to operate for the most part followed accepted lines.

The Bank was privately owned. The capital of \$5 millions was divided into shares of \$50; and no shareholder could hold more than 50 of them. The intentional result of this was to disseminate ownership as widely as possible; and the first list of shareholders contained more than 12,000 names. Strict provisions prevented any foreigner, or anyone connected with one of the chartered banks (which were, of course, suspected of being a Money Monopoly) from being a shareholder or director. The shareholders were permitted, in effect, to vote for the directors of their choice by mail, and some results of this are described in Chapter VIII, section (1). Dividends were limited to 4½ per cent; other profits being put into a limited reserve fund or paid into the Government's consolidated revenue fund.

The management of the Bank was vested in a board consisting of a Governor and Deputy Governor, the Deputy Minister (under-secretary) of Finance without power to vote, and seven directors. These last were elected for overlapping terms by the shareholders; two representing primary industries, two representing commerce and manufacturing, and three representing other occupations. The first Governors were appointed by the Government, but thereafter they were to be appointed by the directors with the Government's approval. From all this it will be clear that every effort was made, according to accepted tenets, to keep the Bank independent of the intervention of party politics.

The ordinary operations of the Bank were to be controlled by the Governor; guided by weekly meetings of the "executive committee" of the board. This consisted of the two Governors, one director, and the Deputy Minister of Finance without voting power. But

²⁰Bank of Canada Act, chap. 43 of 1934. Some parts of the original constitution were supplied in the by-laws drawn up by the Government under the provisions of the Act and published in the *Canada Gazette*, Sept. 15, 1934. See also M. L. Stokes, *The Bank of Canada* (Toronto, 1939).

the last word lay with the Governor, both in matters of policy and ordinary operations; for he was given the power to veto any decision of the board or the executive.

The Bank immediately took over the note-issuing activities of the Department of Finance; and provision was made in another Act for the issues of the chartered banks, not to be extinguished entirely, but to be reduced over a period of ten years to about one-quarter of their existing amount.²¹ Against its own sight liabilities, both notes and deposits, the central bank was required to hold a reserve of 25 per cent consisting alone of gold. A section of the Bank of Canada Act provided for the convertibility of notes into gold bullion; but it could be suspended by the Government and this was done immediately, thus bringing the law into line with the conditions of the time.

The provisions regarding the business of the Bank, like those regarding its ownership, management, and note issues, did not present many unusual features. It might not compete for deposits by paying interest; it might not make loans except to the banks and to the Dominion and provincial Governments; these loans were to be of short duration and, in the case of the Governments, of amounts not exceeding specified maxima. It was permitted to discount and rediscount bills of exchange; and the minimum rates at which it would undertake these transactions and at which it would make loans were to be published. Its power to operate on its own initiative in the Canadian security market was to some extent limited; for while it was freely permitted to purchase high grade securities with less than two years' maturity, it could only hold longer term securities amounting to three times its capital. (This was in addition to certain longer term securities transferred to it in connection with its assumption of liability for the Dominion note issues.)

The chartered banks were required to hold amounts, equal to 5 per cent of their own deposits, in the form of either notes of the central bank or else deposits with it or both. This provision worked little hardship, for most of the banks had been accustomed to keep substantially higher proportions in the form of cash reserves; but one or two banks, whose business had permitted them to hold smaller proportions of cash, were inconvenienced. The banks were

²¹The Bank Act, chap. 24 of 1934, section 61 (2).

much more concerned with that part of the Act which compelled them to sell their Canadian gold to the central bank at the old, legal price of \$20.67 per fine ounce; for the market price of gold in Canada at the time of the Bank's establishment was slightly more than \$35.00.

Scarcely had the banks surrendered their gold at the old price, when legislation was passed to revalue the central bank's stock of the metal upwards to the "current price" (a variable depending on the price in London or New York converted at the current rate of exchange into Canadian dollars). A certain portion of the gold given up by the banks was considered to have been held against their foreign liabilities, and the profit upon this was credited to their accounts increasing their reserves held in the central bank. The profit from the revaluation of the remainder was put to the credit of the Government in an exchange fund.²² The purpose of this fund was to aid in controlling and protecting the external value of the Canadian dollar, should occasion arise. Most of the Government's new fund, which amounted at the time to about \$63 millions, was employed in extinguishing government debt held by the Bank. The effectiveness of the fund was not impaired by its apparent evanescence, because it was not intended to be put into operation until the publication of a proclamation, and none was made. The fund was still lying inoperative in the middle of 1939.

Amendments of 1936 and 1938. The Bank of Canada was established by a Conservative administration. Not long afterwards that Government was defeated in a general election. One of the important planks in the platform of the new Liberal administration, which was returned with a large majority in the House of Commons, was the "nationalization" of the ownership and control of the central bank. This pledge was open to a variety of interpretations,²³ but the reputation of the Prime Minister and his associates did not lead people to expect a very radical reorganization. And they were right.

In an amendment of the Bank of Canada Act in 1936²⁴ nationali-

²²The Exchange Fund Act, chap. 60 of 1935. The effects of the Act were explained in the Bank's *Annual Report*, 1936, pp. 6-7.

²³See A. F. W. Plumptre, "The Bank of Canada's Future" (*Financial Post*, Toronto, Nov. 9, 1935).

²⁴Bank of Canada Amendment Act, chap. 22 of 1936.

zation of ownership was interpreted to mean simply that the Government should own a bare majority of the stock; and new capital was issued to it, in the form of Class B shares, sufficient for this purpose (\$ 5.1 millions). The existing shares in private ownership became known as Class A.

In order to secure nationalized control six additional directors were appointed by the Government, each having initially two votes. These directors, together with the two Governors who had also been appointed by a Government, could therefore cast fourteen votes against the seven of the old directors. The number on the board being rather cumbersome, provision was made for its gradual reduction. From 1941 onwards, there were to be six appointed directors and three elected by the shareholders, each of them with one vote and with overlapping terms of three years.

There were some changes in the status of the Governor. He was made permanent chairman of the board. The important provision that in future the Governor should be appointed, not by the Government, but by the board subject to the Government's approval, was retained. But the finality of his veto over acts of the board and executive was removed; provision being made for appeals to the Government and all vetos being automatically submitted to it. The original reason for the Governor's power of veto had been the predominance of directors elected by the shareholding public. Some curb had to be placed upon the possibly irresponsible actions of those elected. But with the appointment by the Government of directors with a large voting majority, the need for Governors' vetos became remote.

These were the changes which caught public attention; indeed they were intended to do so. Less spectacular, but of importance to the Bank's operations, was the relaxation of the restrictions upon long term investments. It was permitted to hold securities of more than two years' currency to the extent of one-half of its note and deposit liabilities; and included among them could be securities of more than ten years' currency to the extent of three times the Bank's paid-up capital and rest fund. In short, the central bank was permitted to enter the market for medium term securities of the Dominion and provinces on a large scale; and even to take an active part in the really long term market. This departure from central banking orthodoxy was caused, partly by the

Bank's own desire to operate in sections of the Canadian capital market which were less narrow and more evenly responsive than the market for very short term securities, and partly by the desire to ensure that, as the Bank's note issues were gradually increased to replace those of the chartered banks, some securities of medium and long term, and of reasonably high yield, could be purchased to facilitate the expansion.

The shortness of the stride towards nationalization which was taken in 1936 turned out to be convenient; for it allowed the same Government to take another in the same direction, of almost equal length, without overstepping the mark. In 1938 a Liberal Government in the Province of Saskatchewan was seeking re-election, the chief opposition coming from Social Credit forces; and the Liberal Government at Ottawa, supporting their provincial associates by introducing a popular measure of monetary reform, once again nationalized the Bank of Canada.²⁵ This time the private shareholders were bought out; the market price, \$59.20, being paid for each \$50 share. The number of directors was stabilized at eleven, and all were thenceforth to be appointed by the Government "from diversified occupations" and to have a single vote. The capital of the Bank was restored to its original \$5 millions; and adjustments were accordingly made to leave more or less unchanged the amounts, related to capital, which the Bank might invest in securities of the United Kingdom and United States exceeding six months' maturity and in Canadian securities exceeding ten years' maturity. In short, apart from changes in capitalization, ownership, and direction, the position of the Bank was left almost entirely unaltered.

(4) CONCLUSION

The Canadian capital market is fairly well developed. The amounts of marketable securities which are held by financial institutions are large, relative to those in other Dominions, and trading in securities of all sorts is usually active.

The central bank which was originally established conformed fairly closely to accepted lines, although special provisions for local circumstances were made in permitting it to do business with the provincial Governments and in other respects. In the other

²⁵Bank of Canada Amendment Act, chap. 42 of 1938.

Dominions such a bank, expressly precluded from doing any business with the general public and from participating extensively in the longer term security market, would have been almost impotent; but in Canada it occupied from the beginning a position of influence. The subsequent increase of its powers to hold Canadian securities of medium and long terms has been helpful rather than vital to its activities. Its operations in the open market have met with signal success. The chief immediate reasons for success have been the breadth and sensitivity of the local bond market and the stability of the cash reserve proportions of the commercial banks. These and more fundamental reasons are discussed in Chapter IX, sections (2) and (6).

It was the political rather than the financial aspects of accepted central banking that were out of place in Canada. With the first as well as subsequent elections to the directorate open to free vote by thousands of private shareholders, a ludicrous situation ensued. It was, indeed, a free-for-all in which the most vociferous might well have got the votes, had not the Canadian Chamber of Commerce actively sponsored a slate. Thus was democracy saved from itself by the intervention of the business man. The situation, however, clearly could not be left unchanged. Nationalization was accordingly administered in two judicious doses.

While the Conservative Government, under the Rt. Hon. R. B. Bennett, may have failed to please the public in establishing a central bank with accepted defences against political intervention, it succeeded in pleasing a wide variety of opinion by its appointment to the position of Governor. To bankers Mr. Towers was a banker, an assistant general manager in one of the biggest banks. To economists and others interested in monetary policy he was an economist, a member of the executive of the Canadian Political Science Association; and moreover his bank was known to have sponsored central banking and a measure of soft money. To the general public he was a Canadian and young; pleasingly different from the elder statesmen and the English importees to whom, according to rumour, the position of Governor might have been offered.

The relations between the central bank and other leading financial institutions have settled down. That the Bank of Canada can exercise a persuasive influence is indicated by the alteration,

already described, of credit facilities for speculation. The relations between the Bank and the Department of Finance have been extremely cordial; perhaps naturally so, considering how far the head of the latter was responsible for the former. The financial sector of the federal Government has been greatly strengthened, and a valuable addition made to the economic and statistical facilities of Ottawa.

The relations between the Bank and the provinces have not been so sunny. Since the central bank was established there have been an unusual amount of irritation and recrimination between the federal Government and the Governments of some of the leading provinces. The Bank of Canada has, as was inevitable, been drawn into the quarrels. It is, and must remain, closely associated with the central Government because it embodies and gives expression to desires for more active utilization of that Government's constitutional powers over banking and currency. As yet no provincial Government has decided to employ this federal agency as its banker despite the invitations publicly issued by the Governor. Canadian government finance thus remains almost entirely decentralized and competitive. As lately as 1939 two provinces issued optional-payment securities; a policy diametrically opposite to that of the Dominion and the central bank. Amongst the Bank of Canada's relations with the provinces the chief have been with those of the Prairies. In 1937 it acceded to the joint requests of the Dominion and of the three drought-stricken Governments to report upon the immediate financial needs of the latter. In addition, no doubt at the request of the Dominion, it has made a short term loan to one of them. But this is a far cry from (e.g.) the active and continuous relations between the central bank and the state Governments in Australia; for there all but one of the states conduct at least some of their business with the Commonwealth Bank. Nor is there in Canada any focus of government finance, such as the Australian Loan Council, at which the central bank can bring its influence to bear. The other two Dominions, South Africa and New Zealand, are fortunately free from the financial problems of federalism. Thus, while the Bank of Canada finds itself in a relatively satisfactory capital market, it is less fortunate than central banks in other Dominions on account of the unsatisfactory and intractable condition of Canadian public finance.

CHAPTER V

THE CENTRAL BANKS IN THEIR CAPITAL MARKETS CONCLUSION

THIS book has reached a point where it is convenient to pause, taking stock of the material which has been gathered and considering the direction of further investigation.

Concerning the capital markets of the Dominions, it was shown that they were in various stages of development. The Canadian market for long and medium term bonds displayed considerable breadth, and even the market in short term issues had become quite active in recent years; but special financial and political factors were found impeding the central bank's control. In Australia the long and medium term markets in high grade debentures and stock were less developed; although sufficiently broad for controversy to have arisen in well-informed circles regarding the effectiveness of open market operations by the central bank. In New Zealand such operations as these seemed to offer little or no prospect of immediate success, for the whole market was conspicuous for its lack of breadth and liquidity. In South Africa there was indeed an active market for certain types of securities; but these were mining shares, remote from the sphere of operations of the Reserve Bank, and intimately dependent upon the course of opinion in London and elsewhere. Nor was this the only Dominion in which security prices were closely associated with those abroad. In none of the Dominions was there to be found a market in commercial bills; in none was there active trading in treasury bills; in none was there a sensitive, competitive market for call loans; and in only one was the market for foreign exchange unrestricted by the banks' published rates for buying and selling.

And yet in none of the Dominions did the original constitution of the central bank seem to make extensive provision for the peculiar financial environment. Indeed, in each of the three Dominions (all but Australia) where institutions were established with the sole purpose of conducting central banking, the original powers and

duties of the banks generally followed the accepted lines described in section (3) of the Introduction. Their constitutions laid down restrictions of the usual sort. Deposits might not be attracted by the offer of interest. Investments were limited almost entirely to securities or bills of short currency. The power to lend to Governments, or to any but the established commercial banks, was circumscribed. Regulations regarding reserves and note issues followed familiar lines. The commercial banks were compelled to keep certain reserves in the form of liabilities (deposits or notes) of the central bank. The constitutions of the new central banks also made the usual positive provisions regarding the type of business that might be undertaken. Most out of place amongst these were detailed sections which approved of dealings in commercial bills and required that discount rates on these and other securities should be published. Moreover, on all the directorates, except that of the Commonwealth Bank, there were originally a number of men whose positions depended upon election by private shareholders.

Now there is nothing inherently bad in accepted central banking practices: in their appropriate place, a well-developed capital market, they have endowed, let us say, the Bank of England with power and prestige. But it was pointed out in the Introduction that only in such an environment could accepted operations meet with much success; and in the following chapters it has been shown, not only that three at least of the Dominion markets fell substantially short of full development, but also that there were special obstacles to the success of accepted measures.

It was not surprising, therefore, to find in all four countries attempts being made to adapt the banks to their surroundings; partly by the amendment of their constitutions and partly by the adoption of novel expedients within the existing regulations. Emendation and emancipation came most rapidly and most completely to the Reserve Bank of New Zealand. In South Africa, although the need for extended powers was almost equally urgent, extension came in a more gradual and perhaps more orderly fashion; a natural result of the less radical political parties retained in power. In Canada extension was less necessary, both because of the relative liberality of the central bank's original constitution and because of the relatively high development of the capital market. Never-

theless, a certain measure of seemingly desirable liberation was enacted.

Turning to Australia, a rather different trend was disclosed. The Government which founded the Commonwealth Bank was committed to the erection of a competitive commercial institution; but members of the Government had hopes that what was established might develop into a counterpart of the Bank of England. Subsequent Governments passed legislation to encourage this evolution, but without signal success. The arrival of economic adversity in 1929 found a bank endowed with a powerful although peculiar constitution, but with the spirit of central banking scarcely nascent within it. In the years that followed, progress was by no means precipitate towards the initiation of ordinary central banking activity or towards experiment with unorthodox methods. None the less, despite its different origin and evolution, the Commonwealth Bank exhibits as clearly as any of the other three the difficulty which must accompany an attempt to establish accepted controls in an unpropitious financial environment.

Part I of this book, which we now bring to a conclusion, is primarily descriptive. Apart from description, which has its own uses, the chief lesson of the Part is that, especially in their early days, the Dominion central banks were not very well suited to their situation. Two tasks remain. The first, attempted in Part II, is historical. The forces which gave rise to a demand for monetary control in general and for central banking in particular are examined; and special attention is given to the question why central banks with a number of unsuitable features came to be established. The second task is analytical and is undertaken in Parts III and IV. It comprises a scrutiny of each of the various instruments of control available to the central banks and an investigation of the extent of its present and possible usefulness in each of the Dominions. Special account is taken of the outstanding economic characteristics of these countries and of the nature of economic processes within them; for an understanding of these characteristics and processes, especially in so far as they are more or less peculiar to the Dominions, is desirable in local preachers and practitioners of central banking. So extensive is this task that it seemed convenient to divide it into two; and thus Part III is concerned with domestic or internal

affairs and Part IV with international affairs. In order to avoid repetition the recent monetary history of each Dominion is described at length in one, and only one, of the chapters in Parts III and IV. It appeared most suitable to give extensive treatment to Canadian affairs in Chapter IX on "Open Market Operations," to New Zealand affairs in Chapter XI on "Central Bank Lending," to Australian affairs in Chapter XIII on "Treasury Bills," and to South African affairs in Chapter XVIII on "Behaviour of Exchange Rates." For all this historical and analytical material the institutional background which Part I has supplied will prove useful.

PART II

FORMATIVE INFLUENCES

CHAPTER VI

INFLUENCES AT HOME

(1) THE ADOPTION OF CENTRAL BANKING

THE world-wide demand for central banking arose from fundamental economic and political trends towards nationalism. These trends were visible before the War of 1914-18; but that event accelerated them. Thus, while certain large banks such as the Bank of France and the Bank of England had before the War assumed public responsibilities, and while the Federal Reserve System had been conceived although not yet born, it remained for the post-War world to see the emergence of central banking in a recognized and accepted form.

While the position of the large central banks in the world's financial centres was being consolidated, and while their operations were becoming adapted to post-War financial conditions, other central banks were being established in countries that were new, economically or politically. These banks received considerable encouragement from their older counterparts; partly by means of the weight of example, partly by means of direct advice and assistance, and partly through the offices of the Financial Section of the League of Nations. Herein lies the genesis of central banking, not only in the Dominions, but also in the lesser European countries, in South America, and elsewhere.

It is apparently important to stress the political factors which were at work. Any attempt to explain the birth of these war babies in purely economic terms is bound to be abortive; and equally ineffectual is bound to be any attempt (such as has recently been made)¹ to discover whether they would have come into being had pure economic reason prevailed. War babies are more often the products of impulse than reflection: and as for economic reason, attempts to make it pure sometimes succeed only in making it sterile.

¹Vera C. Smith, *The Rationale of Central Banking* (London, 1936).

Rejection of Alternatives. A point came in the history of each Dominion, when some Government, dedicated to the maintenance of existing institutions but moving with the times, found it advisable to introduce measures of monetary control. There were many voters to be pleased and few to be offended; and, moreover, such advice as could be obtained from people who were expert, and at the same time disinterested, was generally favourable. The introduction of new monetary machinery was therefore imminent. The question only remained, what form should the machinery take?

Lots of advice was forthcoming, much of it from unacceptable quarters. In all the Dominions there were those who urged that the state should enter the field of commercial banking; indeed in Australia they had already had an innings before a more conservative Government came in to bat for central banking. But elsewhere, the proposal for nationalized banking was beyond the political temper of the majority; and there would have been terrific opposition put up within any old-line party and much withdrawal of financial support if it had been proposed as a plank in the platform. The very fact that nationalization was espoused by people who admitted themselves to be socialists was enough to make the majority fight shy of it as something dangerously utopian.

In two of the Dominions, New Zealand and Canada, in which the introduction of monetary control came sufficiently late, Social Credit doctrines had taken a firm root; and much advice was offered by the leaders of local groups. In addition, the founder of the movement, Major Douglas himself, was invited to appear before commissions and committees. But here, again, it was nationalization of the whole credit system that was proposed. Moreover, the proposals for specific measures were linked to certain theories of monetary management which sounded queer to most politicians, which academic economists claimed to be muddled, and which orthodox financial men claimed to be entirely incomprehensible and senseless. So Social Credit was ruled out.²

Some people advised that the matter of monetary control should be approached gradually; the first step being the erection of some

²See the *Report of the Monetary Committee, 1934* (Government Printer, Wellington, New Zealand), pp. 69-83; also the *Report of the Royal Commission on Monetary and Banking Systems in Australia* (Government Printer, Canberra, 1937), pp. 422-67.

sort of board to control currency and, perhaps indirectly, credit. This policy commended itself to those few who favoured some change in the currency legislation but who were unimpressed by the record of central banks elsewhere, or who were sceptical of the efficacy of central banking activities in the environment of the Dominions. A board was actually set up in Australia, and lasted from 1920 to 1924; but the experience was satisfactory to practically nobody. In New Zealand and Canada there were scattered academic proposals of the same sort.³ These never made much impression; but in the latter Dominion the proposal was taken up and strongly urged by the Canadian Bankers' Association before the Royal Commission which considered the introduction of central banking. In retrospect it appears that some of the leading Canadian bankers would have been willing, a few even glad, to accept the inevitable central bank; but the others, fighting against intervention to the last ditch and yet realizing that some mechanism of control was unavoidable, secured the support of the Association for a piece of machinery that could do as little harm as possible. The Commission was unimpressed by their arguments.⁴ At the conclusion of their evidence the only Commissioner with both central and commercial banking experience, Sir Charles Addis, replied as follows:

You suggest as an alternative to a central bank the appointment of an Administrative Board. I should just like to say here that in considering that point as you have put it forward, the impression left on my mind, and this is only my own impression, is that this Administrative Board would have no means of control other than through the rate on borrowing under the Finance Act, the effect of which is comparatively small. It would have very wide responsibility and both the banks and the government would very naturally be disposed to place upon it all blame for any mistakes of policy which might occur. It would be unable to establish any foreign contacts unless, indeed, . . . it took such a form as would render it indistinguishable from a central bank.

If I might sum it up in one word, I fear, gentlemen, that it would prove to be a fifth wheel of the coach. I do not believe it would improve your present system in any way.⁵

³B. C. Ashwin, "Banking and Currency in New Zealand" (*Economic Record*, vol. VI, no. 11, Nov., 1930, p. 200); also A. F. W. Plumptre, "Our Glittering Monetary Standard" (*Dalhousie Review*, Oct., 1931, p. 310).

⁴*Report of the Royal Commission on Banking and Currency in Canada, 1933* (King's Printer, Ottawa), pp. 68-9.

⁵*Evidence presented to the Royal Commission on Banking and Currency in Canada, 1933* (mimeographed), p. 3447.

Political Advantages of Central Banking. So much for the chief alternatives to central banking which were available, and the reasons for their rejection. But it was not primarily as a result of elimination that this particular method of monetary control was introduced.

Central banking was attractive to political leaders, and particularly to the fairly conservative leaders who were in all the Dominions responsible for its introduction. For this there were several reasons. A glance abroad showed that it was what was being done in other new countries (which were, of course, getting foreign advice from the same sources as the Dominions). Moreover, and this paradox was most important, accepted central banking supplied a departure from the *status quo* enshrined in a form of orthodoxy. If the time for monetary intervention was ripe, here was an innovation which might steal the thunder of radical reformers but which might also, in the name of the Bank of England, rally the forces of conservatism and imperialism. A central bank of accepted form could, so the experts said, exercise a regulatory influence over currency, credit, and the foreign exchange rate; but an institution of the English model could surely be relied upon not to engage in rash experiments, not to plunge the country into the *débâcle* of the French assignats or the German mark.

Popular demand was for a general measure of monetary control without any clear conception of the form it should take. The specific form of central banking was recommended by economists, by civil servants, and, probably most important, by English authorities. Appreciating the political advantages attaching to its introduction, political leaders took it up; sometimes with more enthusiasm than discrimination. To the several lines of argument employed by them and by other protagonists of central banking we now turn.

(2) ARGUMENTS FOR CENTRAL BANKING*

In all countries, and particularly in those which are democratically governed, any important political innovation will be

*The material in this section has already been published in *Essays in Political Economy in Honour of E. J. Urwick* (edited by H. A. Innis, University of Toronto Press, 1939), pp. 191 *et seq.* It is reproduced here by kind permission of the publishers.

supported by a great diversity of argument. So it was with the introduction of central banking. Sometimes the proponents of central institutions were to be found arguing that the existing banks were exploiting a monopolistic position at the expense of the public and the Government; sometimes arguing that the banks were good enough in their way, and needed only unified and intelligent leadership; some argued that a central bank was needed to protect national interests against the dominance of foreign financiers; others argued that it was needed to cement imperial and international ties; and still others supplied grist to the political mill by their disclosures of the difficulties and dangers attaching to the existing currency legislation.

Intelligent, Unified Monetary Control. "The observer cannot but be impressed by the absence in Canada of any single banking authority. . . . To what extent and through what organizations should the volume of credit and currency be regulated? On what body should lie the primary responsibility for maintaining the external stability of the country's currency? To what institution may the Government . . . most suitably turn for informed and impartial advice on matters of financial policy? In the great, and increasing, majority of countries the answer to these questions has been found in the existence or the creation of a central bank."⁷ So ran the Report of a Canadian Royal Commission in 1933. The same line of argument was followed by the finance minister in each Dominion when he sponsored central banking legislation. "Decision and settled policy are essential. Divided counsel and clashing interests of individual bankers must in the end be fatal to good credit management," said the Australian.⁸ "Our forefathers got along reasonably well with very primitive forms of barter. . . . The central bank merely represents another stage in the evolution of monetary science. . . . [It is] a national institution to co-ordinate and control our banking system," said the New Zealander.⁹

It was broadly true to state that commercial bankers in the

⁷*Report of the Royal Commission on Banking and Currency in Canada, 1933,* pp. 61-2.

⁸The Hon. Earle Page, speech in the House of Representatives, June 13, 1924 (Government Printer, Melbourne), p. 2.

⁹The Right Hon. J. G. Coates, *The Reserve Bank Proposal* (Government Printer, Wellington, 1933), p. 12.

various Dominions had not consciously formulated or implemented a "national monetary policy." In each country there were only a few commercial banks, which facilitated a certain amount of collective activity. As Part I of this book indicated, such action sometimes concerned the movement of published rates of interest or exchange; but was usually taken rather unwillingly, under the pressure of circumstances, with an eye to profits but without much cognizance of its general economic effects. There was certainly no concerted attempt to stabilize price levels or exchange rates or to eliminate business cycles. On the other hand, it must be recalled that stable exchange rates *were* generally maintained, and that these were the result of the efforts of each bank to keep liquid and solvent under a régime in which it relied on its funds in London or New York as liquid assets.

Nowhere is the decline of laissez-faire and the trend to state control seen more clearly than in the mistrust of self-seeking and divided banking counsels. Time was, not so very long ago, when the absence of a single unified purpose was considered to be at any rate presumptive evidence in favour of the existing state of affairs; individual self-interest producing, under the Divine Hand, activity for the general good. Time was, too, when it was presumed that the Government, intervening with the best of intentions, would do the job in such a bungle that the last state would be worse than the first. But the proponents of central banking, of conscious, intelligent control, have scarcely had to pay any attention to such views for they are held only by a decreasing minority. Certainly, if the proponents of central banking had been swimming against the tide instead of with it, they would have found themselves in considerable difficulties. They could not even answer the simple question: What policy should your central bank follow? Individually of course they could reply; but collectively their voices were babel.¹⁰

The desire to introduce unified and intelligent monetary control found much support amongst academic economists. The support was given in three ways: by means of speeches and articles in the press, by means of influence upon commissions and committees, and by entry into influential posts in the civil service. To the writings of economists the foot-note references in this chapter and elsewhere

¹⁰This point is developed by Vera C. Smith, *Rationale of Central Banking*, p. 167.

in this book bear ample witness. As for government commissions and committees, economists sometimes served upon them, the earliest instance being that of the American Professor Kemmerer in South Africa in 1924;¹¹ but more often they submitted evidence and other expert advice. As for entering the civil service, one recalls Mr. Coates' "brain trust" in New Zealand and the outstanding case of Dr. W. C. Clark who saw the Bank of Canada Act passed within two years of his appointment as Deputy Minister of Finance.

Breaking the Bankers' Monopoly. In addition to the statement that the banks did *not* adopt a common policy in the public interest, another was made that they *did* adopt one in their own. In both contentions there was a measure of truth; although the great size of most of the banks made them such easy political targets as to invite exaggeration. In all the Dominions, accordingly, there were groups who saw, in the introduction of a central bank by the state, a means whereby the bankers' monopoly might be broken. These groups fell into three quite distinct classes. One class was of a radical, perhaps socialistic, turn of mind; and regarded the operations of the private bankers as broadly anti-social and predatory. Another class was of small business men, farmers, and other clients of the banks who had reason, real or imagined, for dissatisfaction. The third class consisted of civil servants and members of Governments who were also dissatisfied by the treatment which the banks had accorded them. This was the class that drew most support from academic economists, both on the grounds of breaking up monopolies and the broader grounds already mentioned. We shall consider in turn the arguments and activities of each of these three classes.

The radical and progressive groups did not have much to do with the final establishment of the central banks. It is quite possible, however, that the part they played in earlier years by means of continual speeches inside and outside Parliament was ultimately of considerable significance.¹² When the more con-

¹¹The Reserve Bank was already established; but the Kemmerer-Vissering Commission was invited to make suggestions, *inter alia*, for its improvement.

¹²This opinion was expressed regarding Canada in the *Round Table*, vol. XXIV, 1933-4, p. 622. The following members of the Progressive group made motions in favour of central and national banking (dates and pages of Hansard in parentheses): Mr. Irvine (May 1, 1922, p. 1289 and Feb. 26, 1923, p. 627); Mr. Shaw

servative members of the Legislatures had become favourable to the project, those who held more advanced opinions had travelled ahead and looked back suspiciously. They were apprehensive lest a prop of their platform should be removed by the erection of an ineffectual and all too conservative central bank.¹³ In South Africa the enthusiasts for broader measures of state banking were actually hostile to the establishment of the Reserve Bank.¹⁴ In Canada they opposed the form rather than the fact of the new central bank; arguing that its powers were too limited and that private ownership was merely a thin veil behind which the management of the Bank would slip into the hands of vested financial interests. Large numbers of people in Canada and New Zealand had been taught by Major Douglas and others that central banks were merely the instruments by which international financiers executed their nefarious schemes. They, of course, were opposed; but they had little parliamentary representation. In general, radical monetary opinion gave very qualified support to the actual central banking bills when they were introduced.

In Australia such opinion was also disappointed, but in a different way. The Commonwealth Bank of Australia was founded by a Labour Government, and it gained support from the rank and file of the party largely in order to "break the ring" of private banks. But the left wing of the Labour party was never satisfied. The first Governor, chosen from one of the other banks, followed a co-operative rather than a combative policy; and dissatisfaction has gradually increased as the Bank has tended to retire into the role

(May 21, 1924, p. 2371); Mr. Woodsworth (March 4, 1925, p. 753 and April 14, 1926, p. 2416 and Feb. 13, 1928); and Mr. Coote (1931, p. 1547). At an even earlier date Mr. W. F. MacLean spoke in favour of the creation of a "Bank of Canada as I would call it. It would be a bank of rediscount . . . and emission of a national currency" (Hansard, 1916, pp. 1814-15). The earliest suggestion for a central bank was no doubt that of the Governor-General, Lord Sydenham, in 1841. A friend of Lord Overstone, he proposed the introduction of legislation similar to Peel's Bank Act of 1844. See R. M. Breckenridge, *The Canadian Banking System, 1817-1890* (American Economic Association, New York, 1895), pp. 109-13.

¹³Arnold Plant, "The Relations between Banking and the State in the Union of South Africa" (*London Essays in Economics in Honour of Edwin Cannan*, edited by T. E. Gregory, London, 1927, p. 99).

¹⁴Arnold Plant, "The Future of Central Banking in South Africa" (*The Banker*, vol. V, no. 26, London, March, 1928, p. 385).

of non-competitive central banking.

Amongst advanced and radical groups there were various shades of opinion regarding the nature of the monopolistic operations of the commercial banks. Some regarded these institutions as profiting greatly from their privilege to issue notes; and in Australia, South Africa, and Canada the bankers lent confirmation to this suspicion by objecting most strenuously to the loss of this power. Actually it is very doubtful whether the privilege was as valuable as the bankers thought.¹⁵ The New Zealand bankers seem to have recognized that the issue was of little value; considering that heavy taxes removed most of the profit.¹⁶ Other groups were suspicious of the banks' control of credit; believing that they were consciously expanding and contracting in order to manipulate prices and, in times of deflationary contraction, to obtain control through bankruptcy of the hard-earned wealth of private manufacturers and primary producers. Still others believed that, by keeping credit scarce they were reaping a rich reward of usury; keeping others poor in a world of potential plenty. It was usually made clear, therefore, by the more conservative groups who were responsible for the introduction of central banking, that the new institution was *not* designed to promote inflation or to meet such situations as the radicals pictured.

Some similar disillusionment, but not too much, had to be imparted to the second group which hoped to see the bankers' monopoly broken: that is, to the disgruntled clients of the banks. Their complaints were numerous and their knowledge of central banking was limited.¹⁷ The New Zealand Minister of Finance did go so far as to say that "the setting up of a central bank in New Zealand will undoubtedly lead to cheaper credit . . . for farmers and traders generally."¹⁸ As a statement by a responsible minister this was exceptional; but amongst the voters there was some support

¹⁵For an examination of the estimates made by the Canadian bankers, see article by "Economist" (*Financial Post*, Toronto, Dec. 16, 1933).

¹⁶New Zealand Monetary Committee, 1934, *Minutes of Evidence* (Government Printer, Wellington), p. 39.

¹⁷Illustrations may be found in A. F. W. Plumptre, "The Evidence Presented to the 'Canadian Macmillan Commission'" (*Canadian Journal of Economics and Political Science*, vol. II, no. 1, Feb., 1936, p. 58); also *Report of the Royal Commission on Banking and Currency in Canada*, 1933, chap. VII.

¹⁸Coates, *Reserve Bank Proposal*, p. 4.

to be won for a central bank by dwelling on the grievances against the commercial banks: high interest rates, excessive charges for small services, unduly wide spreads between buying and selling rates for exchange, and a number of other extortions, real or imaginary.

We now turn to the third and most immediately powerful of the groups which challenged the entrenched position of the banks. In the Governments and civil services, as among the academic economists, there was not much credence given to the idea that the bankers were monopolistically manipulating the total volume of credit for their pernicious purposes. Indeed in those circles the view was more widely held that the bankers simply did not understand how bank credit and deposits, viewed in the aggregate, came into being; or what the effects of variations in these factors might be upon the national economy. It was believed, however, that the banks were exploiting too fully their monopolistic position in the provision of short term credit and foreign exchange and that this was reflected in the rates charged, not only to the general public, but to the Governments themselves.

The outstanding instance of a Government and its administrators being provoked, by the banks' monopolistic behaviour, into establishing a central bank is to be found in New Zealand. Three matters in particular produced irritation.¹⁹ In 1931 the banks insisted that they could only provide an exchange pool of £ stg. 12 millions for the Government if they were given a complete monopoly, through a system of licensing, of the exchange accruing from exports. In 1933 they failed to give support to the Government's schemes for debt conversion, and in the end this was an important factor making compulsion necessary.²⁰ In the same year—and this was the most irritating matter of all—the banks insisted on being indemnified for possible losses arising from the Government's policy of exchange variation. The Government undertook to buy all the sterling they offered. In order to buy sterling from the banks it had to borrow from them locally.

¹⁹See H. W. Larsen, "Banking in New Zealand" (thesis presented for the degree of M.A. in the University of New Zealand, 1936, typescript), pp. 62-70; also *Report of the Monetary Committee, 1934* (Government Printer, Wellington), paragraphs 81-95.

²⁰See the pamphlet issued by the Minister of Finance entitled, *A Record of the Internal Debt Conversion, 1933*.

At that time the British treasury bill rate was less than $\frac{1}{2}$ of 1 per cent, a rough indication of the yield the banks were obtaining on their London funds; but when they lent money to the New Zealand Government to buy these funds from them they charged well over 5 per cent. This was the last straw: a central bank was the result.

As in New Zealand so, in lesser degree, in the other Dominions. In Canada interest rates on short term government borrowing were a point of controversy. In South Africa the wide spreads charged by the banks on exchange dealings contributed to the desire for a central bank in official quarters.²¹ And in all the Dominions there were other minor sources of friction. The truth is that, with the growing financial needs and responsibilities of government, dependence upon a small cohesive group of banks became increasingly irksome.

The clash between public authority and financial authority has been described as follows:

The present conflict between governments and financial institutions is not in practice a simple conflict between debtor and creditor or labour and capital (although it undoubtedly arises from the fixed claims to income associated with certain forms of private property) but a conflict between governments and salaried trustees. These trustees who are officials of insurance companies, trust companies, banks, and investment banking companies constitute a small and powerful financial bureaucracy. It is their business to defend the assets under their administration and they may be expected to resist any [downward] adjustment of interest charges which is not forced upon them by overwhelming odds.²²

The clash was sharp over the matter of interest rates, which in the early nineteen-thirties had to be reduced from the extraordinarily high levels produced both by a business boom and by special post-War conditions. It was even sharper over the proposals that the central banks should take over the commercial banks' local stocks of gold at the old statutory price instead of at the substantially higher market price. At the latter suggestion even the bankers who were liberally disposed towards central banking were very annoyed. And yet, as in the case of interest rates, the victory

²¹See Plant, "The Relations between Banking and the State in the Union of South Africa," pp. 74 and 80; also *Summarized Report of the Proceedings of the Gold Conference* (U. G. 18, 1920), pp. 8, 11, and 13.

²²D. C. MacGregor, "The Problem of Public Debt in Canada" (*Canadian Journal of Economics and Political Science*, vol. II, no. 2, May, 1936, pp. 186-7).

went in the end to the Governments in both New Zealand and Canada.²³

Escape from Foreign Domination. In connection with another argument for central banking, it was possible to exploit the inferiority complex which is easily aroused in countries where the people are not fully confident regarding their independence. One of the arguments upon which Mr. Bennett, the Canadian Prime Minister, laid considerable stress in speeches favouring a central bank, was that it would free the Canadian dollar from American domination. Earlier in his term of office he had found his budget considerably burdened by the "extra" cost of servicing debt, payable in American dollars, out of depreciated Canadian ones; and he had, apparently, gathered that the exchange rate between the two currencies was in some way determined in New York, beyond Canadian borders and Canadian control. Nobody operating in the foreign exchange market would describe the situation in this way and it is not the explanation of the Canadian exchange market which is given in Chapter IV above. Nevertheless, Mr. Bennett was anxious to remedy the situation as he saw it; and what is important is that he considered the matter one of great significance, so that it became one of the arguments he used most freely.

Likewise in New Zealand, it was found that the exchange rate was managed from abroad and without consideration of the country's interests. A statement by the New Zealand Treasury, made shortly after the Reserve Bank was established, ran as follows:

Four of the six banks carrying on business in New Zealand, from the point of view of their operations, are primarily Australian institutions. Australia is operating on a sterling-exchange system very similar to that of New Zealand, and the London balances to finance the trade of both countries, so far as these four banks were concerned, really formed one fund. In fact some of the banks themselves did not know how much of their London funds had accrued from New Zealand business and how much from Australian business. [Rates of exchange between New Zealand and London were thus largely dependent upon the position of Australia; the larger country being subject to much wider climatic

²³On the ethical and financial problems raised by the transfer of gold see, the Right Hon. J. G. Coates, *The Reserve Bank of New Zealand and the Gold Question* (Government Printer, Wellington, Dec., 1933); also *Minutes of Proceedings and Evidence*, Select Standing Committee on Banking and Commerce, House of Commons (Canada), 1934, evidence given by S. H. Logan, Acting President of the Canadian Bankers' Association, pp. 897-914, and by W. C. Clark, Deputy Minister of Finance, pp. 917-32.

and economic variations. This situation] worked unfairly to the people of this Dominion.*

Just as Canadians chafed under the charge that their dollar was controlled in New York, so people in the other three Dominions fretted when they heard that their respective pounds were controlled in London. (In New Zealand some people held that the local currency was governed in London and some in Australia.) It is doubtful whether this nationalistic feeling had very much to do with the establishment of the South African Reserve Bank immediately after the War, or with the transformation of the Commonwealth Bank of Australia into a central bank. It undoubtedly had not a little to do with the South African Government's refusal to follow sterling off gold in 1931. It even found a place among the arguments for the establishment of a central bank in New Zealand, that most British of Dominions. It is convenient, however, to postpone more detailed consideration of these matters until the next chapter where we discuss the relationships between the Dominion central banks and London.

International and Intra-Imperial Co-operation. A certain amount could be made out in favour of central banking on grounds of international or intra-imperial co-operation. In all the Dominions, except in South Africa which obtained its central bank at an earlier date, it was possible to quote from the resolutions of the financial conferences at Brussels (1920) and Genoa (1922) which commended central banks to the Governments of such countries as still lacked them. A similar statement came from the World Economic Conference of 1933. The recommendations of various Imperial Conferences to the same effect were also serviceable; and the more tardy Dominions were specifically urged to catch up with the others. Further, the cause of internationalism was actually supported by an appeal to national pride; for it was said that no country could be considered to have attained maturity until it had given birth to a central bank which could represent it at international financial gatherings and at the Bank for International Settlements.

Co-operation was not a cry to evoke great public enthusiasm

*New Zealand Monetary Committee, 1934, *Minutes of Evidence*, p. 12. In regard to this quotation the reader is reminded that the four Australian banks, although twice as numerous, only do about half the business in New Zealand that is done by the two which operate almost exclusively in that country.

in the Dominions. In certain parts it was possible to gain applause for anything which appeared to strengthen the ties of the British Empire; and the proposals for central banks received pontifical approval from the City of London. But in the Dominions it is probable that this approval was more often regarded as part of a predatory plot than as an infallible pronouncement. Those who urged co-operation seldom, if ever, explained in any detail what forms it would take and wherein its benefits would lie. Their broad generalities no doubt appealed to enthusiastic imperialists and internationalists. But even amongst this intelligentsia the question sometimes arose why it should be necessary to establish a certain type of financial machinery, called a central bank, in order to secure co-operation. The only answer seemed to be that central banks abroad, and particularly the Bank of England, preferred to deal with others like themselves; and this, after all, was not a very compelling argument in countries which were, supposedly, increasing their financial self-determination.

There was another objection to the argument of internationalism which was sometimes made: that it was difficult to see tangible evidence of existing co-operation. A Canadian Royal Commissioner, who had been Minister of Finance throughout the War, wrote as follows in his dissent from the recommendation for a central bank: "Expressions of opinion by international conferences no longer, I am sorry to be obliged to say, carry weight with the public in any part of the world. History records no more tragic futilities than the deliberations and resolutions of these all too numerous gatherings from the Treaty of Versailles to the present day."²⁵ Moreover, it has been suggested that little is to be expected from co-operation between central banks because so much of modern monetary and central banking theory is nationalistic and implies the complete negation of an international standard.²⁶

In the next chapter there is some consideration of the place and value to the Dominion central banks of imperial and international connections.

Unsatisfactory Currency Legislation. In each of the Dominions the argument for a central bank was supported by, indeed may

²⁵*Report of the Royal Commission on Banking and Currency in Canada, 1933*, p. 90. Memorandum by Sir Thomas White.

²⁶Smith, *Rationale of Central Banking*, p. 169.

have originated from, the discovery that the existing legislation upon note issue was unsatisfactory. In all four countries the regulations had undergone appreciable changes under the stress of war. After the War they were discovered in Australia to be too rigid; in South Africa and Canada to be too lax; and in New Zealand to be out of touch with actuality.

In South Africa²⁷ until 1920 all paper money was supplied by the commercial banks. Their notes were not legal tender and had to be redeemed in gold. At the very beginning of the War a ban was placed upon gold exports. Thus, without immediate danger to their gold reserves, the banks supported war-time inflation by expansion of their notes and credit. When, after the War, exchange rates were unpegged a high premium on gold developed and it began to be withdrawn from the banks and smuggled abroad. Runs on the banks occurred. The bankers were thus as anxious as anyone to change the existing situation as soon as possible; although they certainly would not have urged the establishment of a central bank as the remedy.

In Australia,²⁸ where the note issues of the private banks had been taxed out of existence shortly before the War, the government note issue was gradually increased under the pressure of war finance; the ratio of gold reserves being maintained by tempting or cajoling the banks to surrender some of their stocks. An attempt was made to impart some direction and elasticity to the issue by the establishment in 1920 of a "Notes Board" (properly, the Board of Directors of the Note Issue Department of the Commonwealth Bank) which had to hold certain gold reserves and was permitted to invest in trade and treasury bills. The Notes Board eked out an unhappy existence during the post-War slump and revival (for which it was held responsible in some quarters) and latterly there was actually said to be a note shortage arising out of the unwillingness

²⁷See C. S. Richards, "The Kemmerer-Vissering Report and the Position of the Reserve Bank of the Union of South Africa" (*Economic Journal*, vol. XXXV, Dec., 1925, p. 558); also Sir Henry Strakosch, "The South African Reserve Bank" (*Economic Journal*, vol. XXXI, 1921, p. 172); also E. H. D. Arndt, *Banking and Currency Development in South Africa (1652-1927)* (Cape Town, 1928), part II, chap. XII, "The Rise of Central Banking."

²⁸See the Hon. Earle Page, speech in the House of Representatives; also L. C. Jauncey, *Australia's Government Bank* (London, 1933), chap. ix.

of the banks to import gold and their inability to obtain notes by other means from the Board. This unsatisfactory state of affairs was a factor in precipitating the reconstitution of the Commonwealth Bank in 1924. Under its provisions the note issue was finally handed over to the Bank; and sterling assets might be held, although not yet as reserves, in its note issue department.

In New Zealand²⁹ the entire paper circulation consisted until 1934 of the issues of the private banks. In war time the banks' powers of issue were greatly extended and even after the lapse of certain war-time privileges they could still issue up to the limit of their coin and bullion, and their holdings of public securities of New Zealand, the United Kingdom, and the Commonwealth and states of Australia. The power to issue against this wide selection of securities might have permitted an indefinite expansion. Actually, however, the banks' statements usually showed their issues to be far less than their eligible assets would allow. There was no incentive to expand the issues because of heavy taxation upon bank notes. Moreover the banks had other criteria than their cash and marketable securities in New Zealand (notably their balances held in London) upon which to base their credit policies. With New Zealand in fact operating on a sterling-exchange standard, the existing currency legislation, which presumed a gold standard with gold coinage in circulation, was clearly out of touch with reality. Redemption of notes in gold had been suspended during the War, and bank notes made legal tender. The latter provision had survived, but was to lapse in 1932. Two years beforehand English advice was secured; and it recommended the recognition of the sterling standard together with the establishment of a central bank.

In Canada³⁰ the system of note issues was most complex. For

²⁹See B. C. Ashwin, "Banking and Currency in New Zealand" (*Economic Record*, vol. VI, no. 2, Nov., 1930, p. 188); also New Zealand Monetary Committee, 1934, *Minutes of Evidence*, statement by the Treasury, pp. 1-13, and bankers' evidence, p. 34; also Coates, *Reserve Bank Proposal*; also Sir Otto Niemeyer, *Report on Banking and Currency in New Zealand* (Government Printer, Wellington, 1931).

³⁰See C. A. Curtis, "The Canadian Monetary Situation" (*Journal of Political Economy*, June, 1932); also by the economists of Queen's University, "The Proposal for a Central Bank" (*Queen's Quarterly*, Aug., 1933); also A. F. W.

many years before the War government notes (known as Dominion Notes) for \$1.00 and \$2.00 used to circulate side by side with bank notes of \$5.00 and upwards. Both issues were subject to fairly rigorous legal limitations, and Dominion Notes, beyond a fixed fiduciary issue, had to be backed dollar for dollar by gold. With the advent of war not only was the fiduciary issue expanded, but under special emergency legislation³¹ the banks were permitted to borrow Dominion Notes from the Department of Finance; and no limitation such as a proportional gold reserve was placed upon the issue of notes in this manner. The objective of this measure was to protect and strengthen the banking system, which was faced by runs, and to facilitate finance generally during the War. The banks soon became fairly accustomed to borrowing Dominion Notes of large denominations, and used them as a basis of reserves for extension of credit and bank note issues. The Government exercised little or no restriction over the banks' use of this privilege; and the natural result, in a competitive commercial banking system, was a substantial expansion in boom times (e.g., 1920 and 1929) and an equally substantial withdrawal of note issues and contraction of the basis of credit in subsequent depressions. In academic circles this unregulated elasticity of the note issues was made the crux of the case for a central bank. A similar case was made in the *Report of the Royal Commission on Banking and Currency in Canada, 1933*.

(3) ATTITUDE OF THE COMMERCIAL BANKS

Opposition to the Establishment of Central Banks. Bankers generally are conservative in politics and opposed to the modern trends towards state intervention and economic nationalism. Finance generally, and particularly that type of finance which indulges in nation-wide or world-wide operations, grew and flourished in the conditions of nineteenth-century capitalism. It

Plumptre, six articles in the *Financial Post* (Toronto, Oct.-Nov., 1932), reprinted in pamphlet form under the title "A Central Bank for Canada"; also *Report of the Royal Commission on Banking and Currency in Canada, 1933*, pp. 57-60.

³¹The Finance Act, 1914, chap. 3, 5 George V. The sections relating to borrowing of Dominion Notes by the banks were re-enacted, almost unchanged, in chap. 48 of 1923. They were consolidated into the Revised Statutes of Canada, 1927, as chap. 70. The working of the Finance Act is described in chap. xi, section (4).

was and is addicted to a laissez-faire state of things partly because business is likely to be more profitable in the absence of interference by a government bureaucracy, partly because any alternative involves administrative changes and these are opposed by the inevitable inertia of the financial bureaucracy itself, and partly because, living with these considerations at the back of their minds, bankers are almost unanimously convinced of the general benefits of laissez-faire and the general undesirability of state intervention. Moreover, if it is intervention in monetary and financial matters that is proposed, the disturbance is uncomfortably close to home. It did not take great perspicacity to see that if a Government set up a national central bank one day, it might do something quite serious to the commercial banks the next.

It was out of these broad considerations that commercial bankers developed their antipathy to proposals for central banks. In all the Dominions the bankers were in opposition; except in Australia where, ever since the foundation of the Commonwealth Bank, the choice has lain, not between control or none, but between central banking and state competition in the field of commercial banking. Faced with this choice the commercial bankers espoused the cause of central banking almost with enthusiasm.³² But elsewhere it has been a different story.

The case publicly presented by the commercial banking opposition³³ fell broadly into two parts. One consisted in blasts against

³²Minutes of Evidence before the Select Committee of the Senate upon the Central Reserve Bank Bill (Government Printer, Canberra, 1930), evidence of the various commercial bankers.

³³The most complete case in defence of the bankers' position may be found in the *Evidence Given on Behalf of the Canadian Bankers' Association before the Royal Commission on Banking and Currency in Canada, 1933* (Ottawa, mimeographed), pp. 3154-3381. A summary of this may be found in A. F. W. Plumptre, "The Evidence Presented to the 'Canadian Macmillan Commission,'" pp. 62-6. Before the Royal Commission was established a series of articles by "A Canadian Banker" appeared in the *Financial Post* (Toronto), at the end of 1932 and the beginning of 1933, and were published as a pamphlet under the title "Does Canada Need a Central Bank?" The points raised there, together with a summary of arguments used in bankers' speeches, appear in J. H. Creighton, *Central Banking in Canada* (Vancouver, 1933), chap. vi.

Summaries, with full references, of the case made by the South African bankers may be found in Arndt, *Banking and Currency Development in South Africa*, pp. 430-3; also A. S. J. Baster, *The Imperial Banks* (London, 1929), pp. 195-9.

political interference in banking institutions of proven strength. The public was warned that the financial structure of the country would be constricted or even undermined if there was too much tampering with interest rates or if the proposed institution trespassed within the banks' legitimate business. It would be dangerous to take away the banks' powers of note issue, or to compel them to keep reserves at the central institution. All this was convincing enough to the bankers themselves, and to a closely associated coterie of business men; but not to any general public with a mind for government regulation. Indeed, as we have pointed out, the proven strength and profitability of the banks was a point of political vulnerability.

The other part of the banks' case concerned matters of technique. The tenor of this part could be summed up by saying that the Dominion capital markets were insufficiently developed for the use of accepted central banking practices. Much of Part I of this book is devoted to an investigation of this contention. The conclusion, reached in chapter V, was that it contained a considerable element of truth.

There was a further reason which underlay the antipathy of some at least of the banks to the introduction of central banking. Ever since early colonial days the field of banking in the countries under discussion has been the scene of jealous competition between local banks and others, the imperial banks, financed and directed from London. In a large measure the local banks have been victorious. This is notably the case in Canada,³⁴ where only the very smallest of the ten chartered banks is controlled from London. The largest and most important bank in New Zealand is a local

³⁴The last serious threat of imperial banking in Canada was averted in 1918. "It is perhaps not unreasonable to assume that Lloyd's intended taking over the Canadian bank [the Bank of British North America] but were purposely fore stalled by the Bank of Montreal, which, as the acknowledged leader among the Canadian banks, felt itself bound to resist this new form of dictation from Lombard Street. This seems the more likely, as the terms offered by the Bank of Montreal were unusually munificent. Both banks were in excellent condition at the time . . ." (Baster, *The Imperial Banks*, p. 225). Barclays might have found greater difficulty in entering South Africa had not the only local institution, the National Bank, fallen on evil days (p. 237). There was considerable opposition in New Zealand when, in 1872, the National Bank of New Zealand was formed in London (pp. 141-2).

institution, and so are the two largest banks in Australia. In South Africa both of the dominant commercial banks are now imperial, but at the time the Reserve Bank was established one of them was still controlled locally. In all the Dominions the introduction of central banking has been facilitated and encouraged by the Bank of England. On this account, as well as others, the innovation was opposed, and usually most strongly by the powerful local institutions.

Leaders in the battle against central banking were found among these large banks, especially those which were confronted with the loss of government business to the central bank. In Canada it was the Bank of Montreal, the oldest bank in the country and the financial agent of the Dominion Government, that stood to lose most, and its influence was thrown against the project. But it was not alone. The chief officers of every Canadian bank (except the one imperial bank, the diminutive Canadian member of the Barclay's group) publicly expressed their disapproval.³⁵

In New Zealand there was similar opposition. The attack on the Government's proposal was led, in a most outspoken way, by the Bank of New Zealand.³⁶ At first sight this seems only natural, for the Bank was the largest local institution and as banker to the Government stood to lose a good deal of business. Nevertheless, the onslaught produced an anomalous state of affairs because, ever since the Bank fell into difficulties in 1893, the Government has owned more than one-third of its capital and has regularly appointed its auditors and four out of six of its directors. However, the Government soon "slipped into the role of a complacent sleeping partner with a junior interest," receiving substantial profits, but never interfering with policy or operations. Thus the Bank of New Zealand became "the leading member of a close monopoly organized on conservative capitalistic lines."³⁷

In South Africa the commercial banks were also unsympathetic to the introduction of a central bank, despite the urgency of their desire to secure a change in the currency legislation. Two at least

³⁵Creighton, *Central Banking in Canada*, chap. I.

³⁶The chief public attack was made at the Bank's annual meeting in 1933. A reply was made by the Right Hon. J. G. Coates, *The Reserve Bank Proposal*, chap. V.

³⁷J. B. Condliffe, *New Zealand in the Making* (London, 1930), pp. 320-1.

of the leading bankers were willing to go so far as to commend a bank in principle; but they feared that the period was too unsettled for the immediate enactment of such an important alteration in the financial system of the Union, and that sufficient consideration had not been given to the matter.

From what has been said it may be gathered that the banks' opposition to central banking sprang from a variety of considerations. But underlying and pervading them all was a more or less clear realization that their long hegemony of the Dominions' financial systems was seriously challenged; and it was challenged, not by other financial institutions whose competition they could attempt to meet in a fair field, but by politicians whose methods and whose very ethics were to be distrusted. Thus, to the bankers, it was an evil day that saw the establishment of central banking; and they strove to postpone it as long as possible.

Co-operation between Central and Commercial Banks. Once the central banks were established in the various Dominions the commercial banks took a less belligerent, more compromising, attitude; finding that the worst of their fears, at any rate, were not immediately realized, and trying to make the best of what seemed to be a bad job. On both sides there were usually protestations of goodwill, emphasizing the absolute necessity for harmonious co-operation if evils were to be avoided and any good were to come from the new institution.

This is not to say that each central bank immediately secured and retained the hearty and understanding support of the local commercial banks. The lack of co-operation arose in part from an inability among the commercial banks to understand, at any rate at first, the methods of the central banks and the significance of their operations. Thus the authorities of the new organizations immediately applied themselves to a campaign of explanation and education.

The lack of support, however, the suppressed antagonism, ran deeper than this. The campaign for central banks was in some of its aspects, as we saw above, a frontal attack upon the entrenched position of the commercial banks. The attack had been successful. The bankers' advice upon matters most close to their own business had been flouted. The newcomer was committed to interfere with the course of exchange and interest rates; and with so much strange

and uninformed talk in the air about financial matters, who could tell where it would end?

Moreover, there was the actual damage to their own business to be considered. It would have been too much to expect, for instance, that the Canadian banks would ungrudgingly surrender their interest in the issue of Dominion government securities, or that the South African banks would willingly part with the Government's deposits. Both in Canada and New Zealand the establishment of the central bank was associated with provisions for the surrender of gold by the commercial banks at substantially less than its current market value. As we have seen, the commercial banks generally took a very serious view of the loss of their powers of note issue. Further, in all the Dominions the banks opposed the enactment of provisions to make them deposit specified reserves with the central bank; claiming it to be unfair that money which they were forced to deposit with the institution should be used in competition with their own operations.³⁸

Bearing these grievances in mind, it is quite understandable that the commercial banks should be slow to support the newcomers. So it was in London when the Bank of England was gradually assuming central banking functions in the latter part of the nineteenth century. The joint stock banks viewed it suspiciously and only very gradually did a measure of sympathetic co-operation develop. So it is, and will for some time remain in the Dominions.

Bankers who Favoured Central Banking. There can be no surprise that most bankers opposed the introduction of central banking. What may be surprising, however, is that certain out-

³⁸Some confusion surrounds this point as it has usually been advanced. The gold, etc., which the commercial banks were holding as reserves, and which they deposit in the central bank, remains in the latter institution as its reserve. It is in no direct sense lent or invested in competition with the commercial banks. But central banks are usually bound by their constitutions to hold gold, etc., in proportion to their notes and other liabilities. The deposits of the commercial banks may therefore provide the basis legally required for expansive central banking operations. These operations may be regarded as competitive with those of the commercial banks. See chap. x, section (1).

However, the commercial bankers in the Dominions believed, rightly or wrongly, that they were being ill-used; and for present purposes that is what matters.

standing bankers actively supported measures of centralized control. One, Mr. Johannes Postmus of the Netherlands Bank, was publicly proclaiming his sympathy for central banking before the War;³⁹ and he lived to become Governor of the central bank which he desired in South Africa. Another, Mr. E. L. Pease of the Royal Bank of Canada, was privately pressing for the establishment of a central bank before the close of the War. There was discussion in the Government, and a committee of financiers was asked to look into the matter; but nothing came of it.⁴⁰ However, although Mr. Pease did not live to see it, his campaign was carried on by others in his Bank, notably, perhaps, by Mr. S. R. Noble, and eventually one of the younger men brought up in the tradition he established became Governor of the Bank of Canada.

In Australia the situation developed along rather different lines. The Bank of New South Wales, largest and oldest of the Australian banks, was the institution which supplied the Commonwealth Bank with its first Governor, Mr. (later Sir) Denison Miller, and with a good deal of technical and moral support in its early years.⁴¹ Unfortunately a split developed subsequently between the two institutions. The Commonwealth Bank became relatively conservative. A new General Manager of "The Wales," Mr. A. C. Davidson, endowed with an active, aggressive character, and a penchant for modern theories of monetary management, has been critical of the pace at which the Commonwealth Bank has seen fit to take central banking initiative. (The situation is not without its counterpart in England, where the Hon. Reginald McKenna of the Midland Bank has been impatient with the Bank of England.) The result has unfortunately been mutual irritation, and a certain amount of recrimination.

Why is it that, like the Midland Bank in Great Britain, we find the Bank of New South Wales in Australia and New Zealand and the Royal Bank of Canada considerably more willing than other institutions to see the extension of central banking activity? It may be that about one leading banker in every ten is sufficiently

³⁹Arndt, *Banking and Currency Development in South Africa*, p. 418.

⁴⁰Round Table, vol. XXIV, 1933-4, p. 621. See also M. L. Stokes, *The Bank of Canada* (Toronto, 1939).

⁴¹C. C. Faulkner, *The Commonwealth Bank of Australia* (published by the Bank, Sydney, 1923), pp. 42 and 45.

diverted from tradition by modern political and economic trends that he can regard centralized control as beneficial; and it is certain that, in each of the banks mentioned, the departure from conservatism has been led by an outstanding personality. It may be (at any rate it has been suggested in more conservative quarters)⁴² that to some extent the desire for control emanates from self-interest or self-protection during a period of deflation: certainly such banks as the New South Wales and the Royal Bank of Canada, with their aggressive expansion into fields of primary production, have reason to be as sympathetic with the inflationary desires of hard-pressed debtors as with the deflationary instincts of orthodox finance. But whatever may be its source, a small stream of advanced opinion within the commercial banks has played an important part in forming the central banks of the Dominions.

⁴²Statement made by Sir Claude Reading (regarding evidence given by Mr. A. C. Davidson on June 3) to the Royal Commission on Monetary and Banking Systems in Australia, Nov. 9, 1936.

CHAPTER VII

ENGLISH INFLUENCE AND IMPERIAL CO-OPERATION

(1) ESTABLISHMENT OF THE CENTRAL BANKS

ENGLISH advice played a part in the establishment of all the Dominion central banks. Any account of the origin of the banks would be incomplete without reference to it. But the matter is of more than historical interest. The central banks of the Empire constantly communicate with each other, giving information and, at any rate when it is requested, advice. It is therefore of current interest to discover what sort of advice has in the past been forthcoming from England.

South Africa. In no case has English advice been more influential than in the establishment of the South African Reserve Bank. The Government was in doubt regarding the best solution of an urgent currency problem. It invited Mr. (later Sir) Henry Strakosch to come from London and investigate the situation.¹ There had been little discussion of central banking and certainly no popular demand for it. Hostile views were entertained in responsible South African circles. "A perusal of these views leads only to one conclusion: Strakosch came, saw and conquered, all in five short months."² The constitution which was drawn up under his supervision was generally orthodox. The Bank's activities were strictly circumscribed, particularly in its ability to lend to the Government and to buy securities which might make it illiquid. It was given a monopoly of the note issue, and proportional reserves were

¹Most advisers from London have been unfamiliar with the financial systems of the Dominions they have visited. This was by no means true of Sir Henry Strakosch, who had been engaged in the supply of German and British capital to South Africa for more than twenty years.

²E. H. D. Arndt, *Banking and Currency Development in South Africa* (Cape Town and Johannesburg, 1928), p. 432. Edwin Cannan said: "The committee [which recommended the Reserve Bank] seems to have been clay in the hands of Mr. Henry Strakosch" ("South African Currency," *Economic Journal*, vol. XXX, Dec., 1920, p. 524).

prescribed. Only a minority of the directors were to be appointed by the Government.

It was not to be expected in those early days of central banking development that the problems of adjusting old machinery to new countries would be solved in the first experiment. What is extraordinary is that so little impression seems to have been made upon English emissaries who, in the following years, offered advice in the Dominions. Something might have been learned from the gradual struggle of the South African Reserve Bank to escape from accepted restrictions and to discover effective methods of control.

Australia. The influence of English advice was clearly visible at three points in the history of the Commonwealth Bank of Australia. The first was in 1924 when the Bank was constitutionally enlarged to be a central bank. It was provided with a capital, and a board of directors. It was permitted to fix a discount rate. It even followed the anachronisms of the Bank of England to the extent of acquiring a separate "department" for note issue. It seems from the speech of the Commonwealth Treasurer, sponsoring the measure, that much of his inspiration had come from his associations at the Imperial Conference of that year in London.³

The visit to Australia in 1927 of Sir Ernest Harvey of the Bank of England apparently had two results. One was practical: the formal separation from the Commonwealth Bank of the savings department, the collection of savings accounts not being an accepted central banking activity.⁴ The other was theoretical: the formulation of a series of thirteen points.⁵ These were widely influential; indeed they were reproduced, in more or less garbled forms, in a number of books and pamphlets in the Antipodes and elsewhere in the Empire. They embodied the strictest orthodoxy; indeed they consisted, in abstract terms, of a thumb-nail sketch

³The Hon. Earle Page, speech in the House of Representatives, June 13, 1924, *passim*.

⁴L. C. Jauncey, *Australia's Government Bank* (London, 1933), pp. 114-15, 166. For descriptions of the circumstances and results of Sir Ernest's visit, see A. S. J. Baster, *The Imperial Banks* (London, 1929), pp. 166-8; also D. B. Copland, "The Banking System of Australia" (*Foreign Banking Systems*, edited by H. P. Willis and B. H. Beckhart, New York, 1929, pp. 96-7).

⁵Ernest Harvey, "Central Banking" (*Economic Record*, May, 1927, vol. III, no. 4, p. 1).

of the Bank of England. They were not "necessarily applicable to conditions as they exist in Australia" said Sir Ernest; but were nevertheless to be "regarded as fundamental in any sound system of central banking."⁶

The third time that English advice produced visible effects in the Australian financial system was in 1930; when a visit was paid by Sir Otto Niemeyer of the Bank of England accompanied by Professor Gregory. They came at the request of the Australian Labour Government primarily to advise on the state of public finance; and their recommendations for stern retrenchment and deflation were met with widespread indignation.⁷ But while they were on the scene the conservative Senate, which was engaged in fighting a variety of bills introduced by the Government, enlisted their support. Their comments were especially requested upon a bill which would have set up a state-owned central bank, leaving the Commonwealth Bank to fulfil its original objective of competitive commercial banking. Both the English visitors threw their full weight against the project. Sir Otto found the Commonwealth Bank itself more exposed to political influence than he could approve, and the new proposals were "even less satisfactory than the existing legislation."⁸

New Zealand. Before he left the Antipodes, Sir Otto was invited to visit New Zealand and advise upon new currency legislation to replace that which was expiring. He recommended the establishment of a central bank; and he also included, as a

⁶The positive points made by Sir Ernest Harvey and which, at various places in this book, have been explicitly or implicitly found wanting in some regard are these: (1) A central bank must keep liquid in order to come to the aid of commercial institutions in emergencies, pp. 30-2; (2) a central bank should be kept independent of political influence by keeping in a minority the directors appointed by the Government, pp. 23-9; (3) a central bank should not compete for commercial banking business, pp. 66 and 97-8; (4) a central bank should not pay interest on any accounts, p. 98; (5) a central bank should not engage in a general foreign exchange business for the purpose of profits, p. 37; (6) a central bank should not use the money deposited with it by the commercial banks in competition with them, p. 180.

⁷See the *Round Table*, vol. XXI, pp. 194-5 and 436; also E. R. Walker, *Australia in the World Depression* (London, 1938), pp. 127-32.

⁸Sir Otto Niemeyer, "Observations on the Central Reserve Bank Bill (1930)" (*Report of the Select Committee of the Australian Senate on the Central Reserve Bank Bill*, Government Printer, Canberra, 1930, p. xviii).

schedule of his Report, a draft of statutes for the new Reserve Bank of New Zealand.⁹

Chapter III disclosed that when the Reserve Bank Act was passed in 1933 it adhered quite closely to the accepted principles of central banking. But that Act was the result of nearly three years and several stages of adjustment. It was less restrictive than the bill introduced into Parliament. That bill was less restrictive than the one which was introduced in 1932¹⁰ but subsequently withdrawn in order that the matter of central banking might be taken up at a less disturbed time and after further consideration.¹¹ And even the bill of 1932 seems to be slightly less restrictive than the Niemeyer Report. The Report itself represented the essence of orthodoxy.¹² The Bank was to be an almost completely private institution. If the Bank were subject to political pressure or "to influences other than economic . . . its existence will do more harm than good," said Sir Otto.¹³ All the directors (apart from the first board) were to be elected by private shareholders. The Bank was to be liquidated if it lost half its capital, unless the Government intervened. Concerning the Bank's operations, the Act of 1933 was sufficiently restrictive; but Sir Otto's proposals were even more so in regard to the amount of long term (more than three-month) securities to be held, the reserves to be held against sight liabilities, and the minimum amounts in which foreign exchange would be bought and sold. Despite these and other minor changes the Act still resembled the Report at most points, many of the clauses being transferred almost verbatim.

Chapter III also showed that, of all the Dominions, New Zealand was the least suited to the introduction of accepted central banking. But Sir Otto seemed to take little cognizance of the country's

⁹Sir Otto Niemeyer, *Report on Currency and Banking in New Zealand* (Government Printer, Wellington, 1931).

¹⁰Bill introduced by Mr. Downie Stewart to establish a Reserve Bank of New Zealand (Government Printer, Wellington, 1932).

¹¹A. H. Tocker, "The Reserve Bank of New Zealand" (*Economic Record*, vol. X, no. 18, June, 1934, pp. 88-91).

¹²For a criticism of the advice he gave on other matters, see D. B. Copland, "New Zealand's Economic Difficulties and Expert Opinion" (*Economic Journal*, vol. XLII, 1932, p. 371).

¹³Niemeyer, *Report on Currency and Banking in New Zealand*, p. 4.

peculiarities, aside from pointing out that it was operating on a sterling and not a gold standard. The only objection to the introduction of an accepted central bank to which he paid any attention was that there was "no bill market, no short-loan market, and, generally speaking, no money market in the full sense of the term," and that in the absence of these features the services that could be rendered by a central bank would be greatly curtailed. "I have given mature consideration to these arguments, and, without wishing to minimize their importance, I am definitely of the opinion that they do not constitute insuperable objections."¹⁴

Sir Otto's visit and departure were recorded as follows in the *Round Table*. In the face of growing economic difficulties "the Government . . . took advantage of the presence of Sir Otto Niemeyer in Australia to invite him to New Zealand; not, however, as explained by Mr. Ransom, the acting Prime Minister, to advise on the economic position generally, but only on certain aspects of banking and exchange. None the less Sir Otto before taking his departure has expressed an opinion . . . 'Given sanity and sobriety, I think New Zealand will be all right.' "¹⁵

Canada. The nature of English advice in connection with the foundation of the Bank of Canada is less obvious than in the cases of the other central banks. Nevertheless it can be discerned in the *Report of the Royal Commission on Banking and Currency in Canada, 1933*. Three of the five commissioners, the two from Great Britain and one of the Canadians, favoured a central bank: the other two Canadians opposed it. In the body of the Report there was no indication of the form which the Bank should take; but as an appendix there appeared "Suggestions as to some of the main features of the constitution of a central bank for Canada." In their addenda to the Report all three Canadian Commissioners, including the one who favoured a central bank, raised objections to points in this appendix. It seems logical to conclude that the appendix primarily reflected British influence.

Indeed, Canadian suspicions were aroused that this influence had had a great deal to do with drafting the whole Report; because it became known that two officials of the Bank of England had

¹⁴*Ibid.*

¹⁵*Round Table*, vol. XXI, 1930-1, p. 436.

been closely associated with the Commission.¹⁶ It was rumoured that one of them was to be the first Governor of the new Bank.

The appendix followed accepted precept. The Bank was to be privately owned, to have the sole right of note issue, to "invest only in the most liquid types of security so that it is always in a strong position to aid the commercial banks in time of need," and so forth.

Quite a lot of attention had been given in Canada, especially but not solely in academic circles, to what form of central bank was appropriate to the country; and some of the results appeared in the evidence given before the Commission.¹⁷ But it is difficult to detect, either in the appendix or the body of the Report, that these results exercised much influence.¹⁸ On the other hand, the opponents of central banking received no more favourable treatment; for the voluminous objections raised by the commercial banks were dismissed rather than discussed.

It was in the matter of private ownership that English influence was most clearly exhibited. No pressure for this form of constitution was forthcoming from Canadian sources. It is doubtful whether one word explicitly in its favour can be found in the thousands of pages of the evidence before the Royal Commission. The three Canadian Commissioners, although divided upon many points, were united in condemning it.¹⁹ It apparently drew its Canadian support solely from the Prime Minister, the Minister, and the Deputy Minister of Finance; all of whom had just returned from the World Economic Conference in London where whatever preference they may have had for private ownership must have been strengthened.

Conclusion. The foregoing samples of English advice suggest certain conclusions. The advice was obviously given in good faith

¹⁶*House of Commons Debates*, unrevised ed., Thursday, March 8, 1934, p. 1430: also *Financial Post* (Toronto), Dec. 16, 1933.

¹⁷For summaries of the more important evidence, together with page references to the original source, see A. F. W. Plumptre, "The Evidence Presented to the 'Canadian Macmillan Commission'" (*Canadian Journal of Economics and Political Science*, vol. II, no. 1, Feb., 1936, pp. 54-67).

¹⁸Cf. the critical review of the Report written by one of the leading Canadian exponents of a central bank, C. A. Curtis, "The Canadian Macmillan Commission" (*Economic Journal*, vol. XLIV, March, 1934, pp. 48-59).

¹⁹See their memoranda attached to the Report, pp. 90, 93, 96.

and with the best of intentions; and those who gave it could claim to be experts regarding the operations of the Bank of England. But they failed, clearly and consistently, to give good advice. They recommended the introduction, through rigid legislation, of the accepted practices of the Bank of England; either ignoring the peculiarities of the local capital markets or else asserting, without proof, that these markets would after the introduction of a central bank assimilate themselves to London. The advice of more recent years does not generally²⁰ appear to be based upon accumulating experience in the Dominions where central banks had already been established. There is nothing to indicate that the advisers were aware of the anachronisms and anomalies attaching to the Bank of England, which they naturally used as their model; and the illogic of some of their advice suggests that they did not fully understand the technical implications of the accepted form of central banking which they were inviting the Dominions to adopt. If they were aware of the peculiarities of economic development in young countries, they made little allowance for them. And finally, they seem to have been unfamiliar with the political temper of the Dominions.

English advice was most insistent when it concerned central banking "independence" by means of private ownership. This system was accordingly adopted in three Dominions. In one it remains practically in its original form, in the other two it has been abolished. In South Africa it has been preserved, one suspects, partly because it is extremely difficult for the central bank to play an important role in the country's development, and partly because the private capitalist groups are more powerful and state ownership less developed than in other Dominions. In neither Canada nor New Zealand did private ownership in its original form survive the next general election: how could it in countries so accustomed to direct state action? English advice was a political boomerang for the parties that accepted it.

In Canada the attempt to introduce a private bank produced a

²⁰The Report of the Royal Commission on Banking and Currency in Canada, 1933, did make reference to the experience of the central banks in South Africa and Australia. These were held up as examples of the success which might attend a similar institution in Canada. There was no detailed consideration of their history, or the obstacles which had confronted them.

ludicrous situation; although too much of the blame must not be laid upon the British advisers, because their suggestions were not carried out to the letter. The Canadian Government decided that the *first* as well as all subsequent Boards of directors should be elected by vote of the 12,000 private shareholders. The result was bedlam.²¹ Sixty-nine candidates were nominated: all sorts and conditions of men. A financial paper recounted:

Solicitation of votes by some of the candidates for the directorate of the Bank of Canada is becoming objectionable to some shareholders. Door to door canvasses have been made in some instances. In others the telephone has been brought into play. Nearly all shareholders have been swamped with pamphlets, pictures and propaganda. . . . There is a widespread feeling among close observers of the Bank of Canada election that parliament left too much to chance and that the result is something very like a horse race or a marathon run.²²

In the end, the Canadian Chamber of Commerce brought out a "slate." It was elected entire to be the board of the new central bank; thus preventing what might have been a most absurd situation. But most Canadians would probably prefer their monetary managers to be nominated by the Government rather than the Canadian Chamber of Commerce.

Of course British advice was that the Government should appoint the *first* board and only subsequent elections left to the shareholders. But it is very doubtful whether the Bank of England's system, of co-option by the existing directors, would have emerged smoothly. Even the general meetings of the South African Reserve Bank, with a more propitious political environment and a smaller and more opulent group of shareholders, have been the scene of open rivalry for the post of director.²³ Much more of this rivalry might have been foreseen in Canada and New Zealand.

Why has English advice not been better? In essence, because

²¹For an account of it, see A. F. W. Plumptre, "The Directorate of the Bank of Canada, An Experiment in Democracy" (*Commerce Journal*, University of Toronto Commerce Club, March, 1935, p. 3). That article was mistaken in suggesting that it was on account of Liberal pressure that the Conservative Government decided to make the first as well as all subsequent directors elective.

²²*Financial Post* (Toronto), Jan. 5, 1935, p. 17.

²³The *Report of the Annual Meeting of the Reserve Bank of South Africa, 1932*, records the controversy between Mr. Baxter, the nominee of the board, and Mr. Parker, an independent aspirant. After some acrimonious discussion, there was a show of hands and Mr. Baxter was declared elected. Mr. Parker demanded a poll; and the decision was reversed.

it is far more difficult than it appears at first sight to transplant an institution. The people who work in a certain institution are often only dimly aware of its relationship to the political and economic life of their own country; and it is then a matter of the blind leading the blind when they suggest that some other country should copy it.

To outside observers it seems fairly clear that the Bank of England occupies a very peculiar place amongst the institutions of Great Britain. It was founded as a monopolistic company, like the East India Company, the South Sea Company, the Hudson's Bay Company, and others. During a long history it developed into something entirely different. Its primary modern function is monetary control in a country and a world which is increasingly dedicated to government intervention. But the Bank was not long ago an ordinary commercial bank, except in the note issue department which was supposedly quite distinct. The senior officers and directors of the Bank still carry with them, apparently, some of the methods of thought which are appropriate to commercial rather than central banking. This is one cause for mistaken advice. Another arises from the persistent attempt to rationalize what is essentially an irrational situation: viz. that a country's monetary policy should be entrusted to a private corporation. A series of arguments has been formulated in favour of "private" or "independent" central banks²⁴ which would never have seen the light of day had not a large, joint stock, organization slipped into the role of monetary control in England. And these arguments are taken up with uncritical enthusiasm, not only by the Bank itself, but by all who are unhappy about the spread of state intervention, and by those in influential business positions who feel that, control being inevitable, it should be exercised by people like-minded and with the same interests as themselves. Arguments which make some sense in reference to the well-established Bank of England then spread elsewhere, and overseas to the Dominions. The illogic reaches its climax, and Adam Smith turns in his grave, when certain economists, in their enthusiasm to avoid political interference, recommend that the powers of note issue and monetary control should be vested in a private monopoly and a joint stock company to boot!

²⁴A summary of these arguments appears in the Introduction, section (4).

(2) RELATIONS BETWEEN THE EMPIRE CENTRAL BANKS

Advantages to the Bank of England. The Bank of England is a public trust, responsible directly for monetary and financial conditions in the London market and indirectly for promoting the economic well-being of Great Britain. In such a position the Bank finds itself deeply interested in the Dominions. The interest arises partly out of the large amounts which British financiers have invested there, a good deal of which is in securities that are on the trustee list in London. The Bank is concerned to see that British creditors gain the protection of sound financial policy in the various debtor countries: "sound" public finance being taken to mean the policy of keeping annual budgets balanced as far as possible, a strict check on the growth of debt, erring on the side of deflation rather than inflation, and insistence upon the sanctity of contracts. The Bank of England, the London money market, financiers everywhere, generally believe that the superstructure of prosperity, to be as permanent as possible, must be built upon this sound foundation.²⁵

The Bank's desire to forward the cause of sound finance in general and sanctity of contract in particular may well explain why it was so anxious that the central banks in the Dominions should be "independent." In so far as they were independent of local political pressure, which was likely to be toward unsound policies, so much the more would they be dependent upon traditional financial precepts, upon the trend of opinion in financial and business circles, and upon the advice of the Bank of England itself.

But the concern of Great Britain with the Dominions is more than the interest of a creditor in the affairs of debtors; it is the interest of a manufacturing country in its supplies of raw materials and vital foodstuffs. Here is a great incentive for all those who control economic and financial policy in the Old Country to strengthen the ties which bind the Commonwealth together. Such a tie might be found in a "chain of empire central banks." The phrase has become a common one. For instance an article in the London *Times* upon "Empire Banking in 1933-4" began as follows:

The outstanding development in oversea Empire banking in the past year has been the progress made with schemes for the formation of central reserve

²⁵For a critical appraisal of the policy, see E. Ronald Walker, "Sound Finance" (*Economic Record*, supplement, April, 1939, p. 61).

banks [in New Zealand, India and Canada]. Thus will shortly be realized Mr. Norman's²⁶ plan, initiated after the War, for the establishment of a chain of central banks for the dual purpose of facilitating the economic development of the countries concerned, and enabling the Empire to cooperate more closely than would otherwise be possible in all financial and banking questions of common interest.²⁷

In imperialist sections of the Dominions the suggestion met with a ready response. "Our idea is that there should be an Empire chain of central banks, and New Zealand is going to supply her link," declared the Right Hon. J. G. Coates.²⁸ In other sections, however, the tie that binds was not so blest; as we shall see below.

The desire in England for a chain of Empire central banks was a latter-day expression of financial imperialism. The terminology was changed and the word co-operation figured more than formerly, but the essential purpose was the same: the maintenance and extension of London's influence and control. The expansive drive of English commercial banking dates from the 1830's and of other forms of finance from much earlier times. In the post-War era the most impressive efforts were put forth by some British banks, notably Barclay's and Lloyd's.²⁹ A few months before his institution was absorbed by Barclay's, the chairman of the Colonial Bank said: "The answer to this question [why the capital and powers of the Bank should be extended?] is rather an Imperial than a banking one, though perhaps it would be more correct to say that it is an Empire Banking one. . . . [The proposed changes] would be of the greatest possible help in Empire development."³⁰

Since 1931 there seems to have been an intensification of the British desire for co-operation between the central banks of the Empire.³¹ It may be that this has been the result of the lack of success of other British financial projects. Immediately after the War the energies of British finance in general and of the Bank of

²⁶Referring to Mr. Montagu Norman, Governor of the Bank of England.

²⁷*The Times* (London), July 26, 1934, p. 18.

²⁸Canadian Press Cable from New Zealand, published in the *Gazette* (Montreal), and the *Times* (New York), Nov. 22, 1932.

²⁹See A. S. J. Baster, *The Imperial Banks* (London, 1929), chap. vi; also A. L. Gordon MacKay, *The Australian Banking and Credit System* (London, 1931), chap. vii.

³⁰Quoted by Baster, *The Imperial Banks*, p. 235.

³¹Cf. Sir Josiah Stamp, *Central Banking as an Imperial Factor* (University of Nottingham, Cust Foundation Lecture, 1934), p. 27 and *passim*.

England in particular were bent towards the restoration of the finances of Europe on a gold, or gold-exchange, standard. But when Britain was herself forced to abandon gold in 1931 a large part of the edifice, so laboriously constructed, came tumbling down. The failure to re-establish world-wide freedom of exchange of goods and currencies may have led, quite naturally, to a diversion of forces from that front into other endeavours. One of these seems to have been imperial co-operation.

As a result of its increasing interest in the economic and financial circumstances of the Dominions the Bank of England has apparently been very anxious to improve its sources of information regarding them. Before the establishment of local central banks, information had to be picked up elsewhere. No doubt the growing independence of the Dominions' financial structures has increased the desirability of obtaining direct information, rather than relying upon what was available in the many London financial houses which are represented on the Court of the Bank of England. If information had to be forwarded from authorities abroad, the problem of choosing the proper agents arose. Private banks were probably not generally in a position to supply what was wanted; and would have special interests and biases of their own. The difficulties, real or imaginary, of dealing with government treasuries or departments of finance have already been described in section (4) of the Introduction. From the point of view of the Bank of England, the ideal sources of information would be independent central banks; so here was another reason to press for their establishment.

Moreover, the Bank of England would have one very tangible benefit from the establishment of such banks: to wit, the disposal of their balances in London. Before the War the Bank had learned that its power in the market could be augmented by the transfer to itself of foreigners' balances in London.³² The Dominion central banks between them (especially including the Reserve Bank of India) might give the Bank control over some £100 millions.³³

³²R. S. Sayers, *Bank of England Operations, 1890-1914* (London, 1936), pp. 39-43.

³³In the *Report of the Bank for International Settlements*, 1936, p. 38, there appears a chart showing the movements of the "Central Sterling Resources" of Australia, Egypt, South Africa, and India. In 1925 and again in 1934-5 the total fluctuated between £120 and £140 millions: in 1931-2 it fell below £80 millions. Throughout the period India owned about half the total. It is

and more if the central banks could secure most or all the London balances of the local commercial banks.

Considering all these reasons there can be no surprise that the Bank of England was anxious for the establishment of an independent central bank in each of the Dominions, and for the maintenance of continuous relationships with it.

Advantages to the Dominions. From many points of view it is of great benefit to the Governments of the Dominions that their central banks should maintain intimate and cordial associations with the Bank of England. (It is equally important that the Bank of Canada should maintain friendly relations with the Federal Reserve System. There is no need to repeat this at each point in these paragraphs where advantages of the relationships between Empire central banks are described.) Of paramount importance, the Dominion Governments must from time to time refund their debts in London. Also they may from time to time seek new capital there, although the days of heavy borrowing for developmental purposes are now over. The Bank of England is in a position to supply information regarding the course of events and the probable trend of affairs in London finance; and the information is unrivalled if for no other reason because the influence of the Bank, combined with the Treasury, over events and trends in London has increased and is increasing. This information is not directly available to the Dominion Governments, because the Bank of England prefers not to deal with Governments; but it can be made available to them through local central banks.

The Dominion central banks can also secure, for their Governments, the assistance of the Bank of England in other matters. Its information upon world-wide movements of business and finance may be obtained. Its expert services may be secured in handling the short term balances in London, the "London funds" of the Dominions. At times the Dominion central banks may feel the need for short term loans, to protect their exchanges or for other purposes; and these may be forthcoming either from the Bank or from the London market if the Bank approves. Whether it would ever be desirable to support an exchange rate by such means cannot be discussed here.

impossible to find out what proportion of these funds was under the influence of the Bank of England.

Lastly, just as Great Britain needs to maintain its supplies of imported raw materials and foodstuffs, so the Dominions need to maintain favourable conditions for their products in their chief market—Great Britain. For this purpose marketing organizations, public and private, may be of service; and the Dominion central banks may assist by supplying such organizations with authoritative information upon events in London, Liverpool, and elsewhere. The arrangements reached between the Bank of England and the Reserve Bank of South Africa regarding the disposal of gold have probably been beneficial to both countries concerned. Moreover, the consistent maintenance of cordial financial relationships between the countries of the Empire may, at times, prove useful in the sale or storage of primary products. With British markets increasingly drawn under government control, both for war and peace time purposes, the power that can be used by central agencies of all sorts in the Dominions inevitably increases also.

Other Aspects. When children and grown-ups play together the result is often unhappy. For this there are several reasons. A triviality to the elders may be a matter of grave concern to the youngsters. The experience of the elders is wider, and their familiarity with the accepted rules of the game makes them inimical to rampageous innovations. And most important, there hangs over the relationship the ultimate superiority of the grown-ups; the knowledge that, if greatly exasperated, they may say at any moment, "No supper this evening," "No pocket money this week."

No creditor likes to admit openly that he is concerned in the private affairs of his debtor, no banker likes to be told that he has invaded the independence of his client. An editorial in the London *Times* explained: "There has . . . been a feeling in certain quarters that the creation of a reserve bank [in New Zealand] has to some extent been inspired by a desire on the part of British monetary authorities to dictate to New Zealand in matters of monetary policy. Nothing, in fact, could be farther from the truth. The creation of a central bank which has everywhere been regarded as a symbol of maturity is, on the contrary, the surest guarantee of independence. . . ."

But the force of this assurance was weakened because the editorial went on as follows: "Negotiations are proceeding for the conversion of the £5,000,000 loan in London which matures early next

year. . . . The credit of New Zealand deservedly stands high in the London market, and it would certainly be a pity if any acute controversy over the reserve bank measure, which has been framed in accordance with the best expert advice, were permitted to impair her excellent financial reputation."³⁴ The nature and source of "the best expert advice" were explained above on pages 185-7.

It is quite possible for parents and children to play together with pleasure; and it is quite possible for the Dominion central banks to co-operate with the Bank of England with mutual advantage. But difficulties may arise. The interests of the Bank of England, representing a creditor group in a creditor country, may from time to time diverge from the interests of the debtor Governments of the Dominions. At times it may even be necessary for debtors to assert their "right to go broke"; a right that will be hotly contested by all creditors, whether at home or abroad.

Moreover, as the preceding section of this chapter argued, the advice on central banking which the Dominions have in the past received from Great Britain has left something to be desired. The emissaries from the Old Country seem to have exercised influence, by reason of their apparent authority, beyond the merits of the case they came to support. This condition may not belong entirely to the past. In regard to it, however, it is necessary to recognize that the Bank of England apparently is not the institution it was fifteen, ten, or even five years ago. Now, at the end of the nineteen-thirties, much of the leadership and much of the control in the London money market has passed from the Bank to the Treasury. Close collaboration between the two continues; but the relative influence appears to have changed. Perhaps the rise of the treasury bill to pre-eminence in the short term market has been chiefly responsible, perhaps personal changes and other factors. At any rate, the Bank appears less militant in its policies and less active in pursuing them. On the other hand, the Treasury is not imbued with the same traditions of internationalism and imperialism; nor is it so permeated by a creditor point of view. Thus recent changes in London may have been increasing the possibility of harmonious collaboration between the Dominions and Great Britain.

But there is danger in implying that the Bank of England is

³⁴*The Times* (London), Sept. 21, 1933.

dangerous at all. So many writers, not the least in the Dominions, regard the Bank as the fount and source of evil, that anyone who criticizes it is liable to be counted among their number. The distrust of the Bank is sufficiently widespread for the Governors of the Dominion central banks to have referred to it, and to have asserted their freedom from whatever contamination there might be.³⁵ The attacks on the Bank of England's influence run all the way from the witch hunts of Major Douglas and his followers³⁶ through to the well-intentioned but misguided inferences which students of monetary affairs sometimes attach to the evidence before them. The mistrust of the Bank extends into even higher circles. As one director of a Dominion central bank remarked in conversation, nothing would bring unanimity amongst his fellow directors more quickly than opposition to suspected dictation from England. Thus, with the Bank of England less militant, and the local leaders on the defensive, the probability of anything in the nature of direct intervention is remote. The creditor-debtor relationship remains, with its possibilities of friction; but even that seems likely to diminish as the years go by and the Dominions repay their past borrowings.

Nature of Collaboration. The collaboration between the Dominion central banks and the Bank of England takes three forms: the interchange of information and advice, the interchange of visits, and the appointment of men who have had experience in one central bank either to the staff or the directorate of another.

Some reference has already been made to the exchange of information and advice. This goes on intermittently as occasion arises; and also takes the form of a regular fortnightly letter from the Bank of England. The following evidence of the late Chairman of the Commonwealth Bank of Australia, first given in 1931 and reproduced in 1936 by his successor, indicates the nature of this

³⁵According to the *Bankers' Magazine* (London), vol. CXLI, p. 35, the first action of the Governor of the Reserve Bank, upon arriving in New Zealand, was to announce "his complete severance from the Bank" of England. See also *Report of the First Ordinary Meeting of the Reserve Bank of New Zealand*, June 7, 1935, p. 23; also *Report of the Annual Meeting of the Bank of Canada*, Feb., 1936; also the Evidence of Sir Robert Gibson on the Commonwealth Bank Bill, a part of which is produced below.

³⁶C. H. Douglas in his various works, and recently in *The Alberta Experiment* (London, 1937).

letter and the attitude of these central bankers towards the material obtained:

The Commonwealth Bank, as a central bank, has the great honour of being looked upon by the Bank of England as an institution in good standing. The Governor of the Bank of England has been good enough to extend to the Governor of the Commonwealth Bank a fortnightly letter in which are reviewed all questions with respect to world monetary conditions, trade, prices, and so forth. It is confidential as between banks, because it is the kind of information which it is necessary for central banks of the world to possess.³⁷

From time to time members of the Bank of England visit the Dominion central banks, and from time to time members of the Dominion banks visit each other and the Bank of England. Reference has already been made to the evil influences which are sometimes attributed to the Bank of England; and in order to avoid unnecessary comment these visits are kept quiet. It may be that the desire to keep things dark has led to further and even deeper suspicions: what could be more sinister than the black-cloaked Governor of a central bank who pretends to be a harmless professor? But apart from this, it is also just possible that the desire to keep things quiet has stultified the results of some of these visits. From what little information is available there appears to be a tendency for the visitors from the Bank of England to see few if any people outside the central bank of the country they are visiting. If so, this tends to cement a clannishness, a masonry, an exclusiveness, and in the end a narrowness, to which all groups, not excluding central bankers, are liable.

Prolonged visits of central bankers from the Dominions and elsewhere have been facilitated by the Bank of England in recent years. Through the courtesy of the Bank it has been possible for a number of visitors to take home a working knowledge of its organization and methods. In the long run these visits, sometimes lasting several months, may be a most important factor in maintaining collaboration between central banks and the influence of the Bank of England.

Lastly, and most immediately important, there has been the

³⁷Sir Robert Gibson, evidence given on the Commonwealth Bank Bill, *Parliamentary Debates, Australia*, May 6, 1931; also *Proceedings of the Royal Commission on Monetary and Banking Systems in Australia*, evidence submitted by Alex. F. Bell, Acting Chairman of the Commonwealth Bank, July 30 and Aug. 20, 21, 1936.

practice of appointing to the staff or the board of one central bank men who have served another in some capacity. Three of the four Dominion central banks have gained English assistance in this manner. Officers of the Bank of England were appointed as the first Governors of the Reserve Banks of South Africa and New Zealand, and as the first Deputy Governor of the Bank of Canada. There can be no doubt that, whatever disadvantages the public may have attached to these appointments, they have spread throughout the Empire a great deal of experience in the techniques of central banking. It is interesting to note that the first Governor of the Reserve Bank of India had some time previously been with the Commonwealth Bank of Australia.

The Bank of England has, on the other hand, availed itself of the services of men from the Dominions beyond the Seas. While those in charge do not seem to have appointed to their staff any men directly from the Dominion central banks, they have taken some care to have in their employment men with broad knowledge of financial conditions in the Dominions. This tendency to round out the staff of the Bank in order to promote imperial co-operation may be relatively new; but for a very long time the court of directors has been supplied with men of experience in the Empire and throughout the world. A recent writer in the *Economist* said:

Among the directors elected for the coming year there were two new candidates, Mr. R. T. Bunbury and Mr. John Martin. Mr. Bunbury was formerly general manager of the Indian house of Forbes, Forbes, Campbell and Company, and he also served on the Board of Governors of the Imperial Bank of India. Mr. Martin has gold mining interests on the Rand, and was the president of the Transvaal Chamber of Mines. These new appointments therefore strengthen the Bank of England's connections with the Empire. . . .⁸⁸

And then he hastened, like the writer in the *Times* quoted on pp. 196-7, to allay suspicions: "Nor does this imply any sacrifice of their independence by the Dominion central banks, but on the contrary it helps to foster mutual cooperation between them and the Bank of England."

(3) FORMATIVE INFLUENCES: CONCLUSION

Among the various forces which formed the Dominion central banks two were of paramount importance: nationalism and imperialism. These two worked together for the establishment of the

⁸⁸*Economist* (London), vol. CXXVII, no. 4884, April 3, 1937, p. 22.

banks; but they diverged on matters of structure and constitution. Each wished the new banks to serve its particular purposes. Nationalism required that they should be creatures and agents of the state, devising and implementing financial policies in the national interest and generally benefiting the Government of the day. Financial imperialism, operating chiefly from London, required that the relationship of the banks with the state should be loose and that they should be safeguarded from undue influence by the Dominion Governments towards policies which were unsound and unfavourable to London.

Working together with imperialism was to be found a modicum of internationalism. Rather fair-weather internationalism it was, for the most part; of the post-War variety which hastens to reassure its opponents that national interests must ultimately predominate over international. A very different internationalism from that which flourished on free trade and laissez-faire.

These were the fundamental forces which were grouped about the banks; but the groupings were not always consistent, nor the issues clear. Wherever actual damage was to be done, either to financial institutions or to political interests, a measure of opposition emerged. This was the case with existing financial institutions, such as the commercial banks, despite the fact that they themselves enshrined a considerable measure of both nationalism and imperialism; it was the case, too, with radical political groups despite the fact that, while distrusting imperialism, they were more enthusiastic than any others in the cause of economic nationalism.

For the most part neither nationalism nor imperialism spoke with the still small voice of logic. Instead they spoke with many tongues, often babbling and contradictory. This was more true of nationalism, which produced a great variety of arguments for monetary control in the abstract but relatively few suggestions regarding concrete machinery. Imperialism was less verbose and more precise, having fewer spokesmen and a clearer idea of what it wanted. Its advice, being more distinct, was at the beginning more influential; and thus the Dominion central banks were cast to resemble the Bank of England in many, too many, of its peculiar features. But nationalism has time on its side; its influence is in the ascendant in the Dominions. Moreover, it is said that the Old Lady of Threadneedle Street is not what she used to be.

PART III

OBJECTS AND OPERATIONS: INTERNAL

CHAPTER VIII

THE INFLUENCE OF INTEREST RATES AND CREDIT POLICIES

(1) INTRODUCTION

THE immediate objects of central banking operations are financial. By means of a variety of devices, such as open market operations, lending, discounting, and the exercise of persuasive influence, a central bank attempts to mould the behaviour of the local financial community. Most of Part III is devoted to considering the effectiveness of these various devices in the special circumstances of the Dominions.

Ultimate Objects. This chapter, however, is concerned with the attainment of further and even ultimate objects. These are social and economic rather than financial. Through the medium of its financial influences a central bank attempts to regulate the flow of incomes, the level of employment and production, and the general state of business. The volume of the national income and its distribution may be affected; and with it the standard of living of various groups and the community at large.

The mitigation of business booms and slumps, with their evil effects upon the volume and distribution of income, is the chief ultimate objective of central banking policy in most countries nowadays. Researches have suggested that, amongst the more important originating factors in these movements, are changes in the amount of investment going on in the community; that is, changes in the amount which businesses of all sorts (including farms) are spending upon the introduction of new equipment and the extension of old. Some of this expenditure is financed out of the current incomes or profits of the businesses themselves; but much of it is financed by or through the financial system. Thus, if the central bank can exercise an influence over the financial system, or at any rate over parts of it, it has a means of mitigating cyclical movements.

Even if the primary task required of the central bank is the time-honoured one of maintaining the gold standard or some other

system of stable exchange rates, rather than ironing out cyclical fluctuations, control over the rate of investment is important. This, however, is a matter which must be left until chapters XV and XVI in Part IV, where international objectives and operations are under discussion. At that point an account may be found of the processes of economic expansion and contraction which, since they are intimately concerned with international influences, cannot be satisfactorily treated as yet.

In the remainder of this chapter, for the purposes of analysis, we shall assume that central banks are generally able to achieve their immediate financial objectives. On that rather optimistic assumption we shall proceed to consider how far the financial influences thus exerted would be sufficient, in the Dominions, to change the course of economic events, and especially to level off excessive movements in the volume of investment. To be more precise, it is assumed that central banks possess the following powers:

- (a) Ability to influence the cash reserves of the commercial banks either by lending or open market operations or other means.
- (b) Ability to exert further influence over the commercial banks by its powers of persuasion. This ability is assumed to extend in lesser degree to other financial institutions and in still smaller measure outside the financial community.
- (c) Ability, through all these means, to secure occasional movements in the level of interest rates published by various financial institutions.
- (d) Ability to influence the prices and interest yields of high-grade, gilt-edged securities, both directly through open market operations and indirectly through the effect of these operations on the reserves and policies of the commercial banks and other institutions. This influence on high grade securities extends competitively, it is assumed, some way through the market to more risky securities.
- (e) Ability to exert persuasive influence over the policies, particularly regarding borrowing and spending, of the central Government. This is supplemented, we assume, by a smaller measure of influence over other governmental bodies.

Such is the nature of control over credit policies and interest rates which we shall, for the purpose of analysis, assume that central banks possess. These abilities are at once the immediate objects of central banking and at the same time the means to the ultimate objects. Much of the remainder of Part III is occupied in showing how far short of achieving all their immediate objectives the various Dominion central banks fall. In so far as they cannot achieve their immediate objects they are so much the less likely to achieve their ultimate objects, at any rate as long as they operate along more or less accepted lines. However, their immediate shortcomings are not the concern of this chapter.

Nature of General Changes in Credit Policies and Interest Rates. Before proceeding to examine the way in which general changes in credit policies and interest rates work themselves out on the volume of investment and the economic life of the Dominions, we must pause to point out certain aspects and peculiarities of such changes.

All sources of financial accommodation tend to be affected in the same *direction* by the policies initiated by a central bank, but there is no likelihood at all that they will be affected in the same *degree*. Open market operations are usually undertaken in the field of government securities and the prices and yields of these and other gilt-edged issues will be affected first and foremost, while the effect on other more risky securities and on other types of lending will be less and in many cases negligible. In short, wherever the central bank's influences impinge upon the market, in that vicinity the effect will be relatively large while in more remote sections it will be small or non-existent.

To say that all types of securities will be *affected* in the same direction is not to say that they will of necessity *move* in the same direction. Cyclical movements of economic conditions are always accompanied by a great diversity of trend amongst groups of securities as well as amongst individual issues. When times are bad the gilt-edged group and (on account of falling costs) gold mining shares are likely to be rising; at the same time most industrial issues and the securities of public bodies whose financial position is deteriorating are likely to be falling. There is no reason to expect that this normal disparity of movement will be eliminated by central banking operations; only that, when the central bank is undertaking expansion, those securities which are falling will not

fall so far or so fast as they otherwise would, and *vice versa* when it is undertaking restriction.

The fact that a central bank's operations tend to affect all sources of credit, all types of security, in the same direction means that, for most purposes, it is unnecessary to adhere strictly to distinctions between different yields, different grades, or even different types of security. In particular it is usually unnecessary to draw a sharp line between securities which are evidence of ownership (e.g., shares) and those which are evidence of debt (e.g., debentures); or between "pure interest," "risk premiums," and "profits." A period of tightening money is generally one in which those who wish to raise money, whether by borrowing directly from financial institutions, by the issue of bonds or debentures, or by the issue of common or preferred stock, are confronted by decreasingly sufficient sources of funds. Such an insufficiency may be reflected in a fall of security prices and a rise of current and expected yields on various types of securities; but, as we shall see, the extent of the insufficiency is not likely to be reflected accurately in these movements.

Current Yields not Fully Representative of Financiers' Attitudes towards Business Extensions. It is of importance to keep in mind that various sections of a capital market, particularly of a market that is not very well developed, are to some extent insulated from each other; and further, that each individual loan or security issue has its own peculiarities. Economists have often written about capital markets as if they were "perfect"; markets in which knowledge of events and competitive influences spread evenly and widely and in which a homogeneous article ("free capital" or "loanable funds") was bought and sold. For some purposes this point of view has its uses; but it is insufficiently realistic for the detailed, short-run problems of central banking policy.

It is specially necessary to remember that changes in the ability of people to raise new funds for new projects and extensions are seldom if ever adequately reflected in changes of current interest rates and security prices. An extreme case may be suggested: one in which political or economic disturbance completely dries up the sources of new funds, and yet outstanding loans which currently mature are renewed with little or no rise in interest rates and the prices at which existing securities are traded certainly do not sink

to zero. An extreme case of the opposite sort might arise if financiers and bankers saw little reason to revise their opinions regarding outstanding loans and security prices but were persuaded that certain new enterprises, perhaps involving the exploitation of new discoveries or inventions, deserved ample financial support on easy terms.

This distinction between, on the one hand, changes in the prices and yields of existing securities and in financiers' willingness to carry existing positions, and, on the other hand, changes in their attitude towards the finance of extensions and of new enterprise, is an important one from the point of view of central banking. It means that a central bank's success in promoting or restraining new enterprise and extensions, and thus in promoting or restricting economic developments, must not be judged solely by the influence which the bank exerts upon existing security prices or current interest rates. It may be, at some times, that the central bank is much more successful in achieving its real objects than appears on the surface; at other times much less successful. Each situation must receive individual attention before the extent of success can be gauged.

Moreover, the existence of this distinction means that a central bank's activities in persuading small groups of financiers to its own attitude regarding credit policy may be of great importance—perhaps, at certain times, of greater importance than its activities in changing the total volume of money and credit available to the financial community. For so much of the time of so much of a financial community is nowadays occupied with the management of outstanding debts and dealings in existing securities; while the finance of new enterprise and extensions is the concern of limited groups for a limited part of their time. There is little doubt that, where really large projects for the investment of fixed equipment are under consideration, persuasion may be far the most important means of control. On the other hand, where the extension or even the normal maintenance of inventories and working capital is involved (and movements of these factors are of considerable cyclical importance), the pressure exercised by general changes of policy and interest rates amongst the financial institutions must normally be relied on to produce the desired results.

Central Banks' Concern with Distribution of Credit. It has often been said, and widely accepted, that the concern of a central bank is with the total supply of money and credit in the community; while responsibility for distribution of the supply lies with private, profit-seeking financial institutions. This dictum is consonant with the conception of a central bank operating, as it were, in the background, exercising a general regulatory influence but refraining from actions which bring it into competition with other financial institutions. It conforms with conservative financial opinions, satisfies the demands of vested financial interests, and harmonizes with the general laissez-faire presumption that the forces of competition and self-interest are the best guides for distributing available supplies of capital. It is a point of view, however, which is held less and less rigidly. The Bank of England, both directly and through subsidiaries, has taken measures to influence the disposition of British capital.¹ Central banks elsewhere have done likewise, and the Dominion central banks are following suit. The Commonwealth Bank of Australia, with its ordinary banking business and its broad constitutional powers, is probably in the strongest position of the four to influence the distribution of credit. In the case of the other three their influence depends chiefly on their prestige and powers of persuasion.

The need for central banking intervention in the distribution of credit can be defended on grounds of business cycle control; it does not necessarily involve socialistic arguments for complete nationalization of banking. The business cycle is not an orderly and equal movement of all businesses in the same direction at the same time, but a composite of many and diverse movements of particular businesses and industries. In order to check what is, or may become, a precariously expansive movement it may seem eminently desirable, to those who are in a position to take a fairly detached view of developments, to pull in the reins on any particular line of business which seems to be breaking into a runaway pace. Sometimes this runaway business will be that of commodity or security speculation, sometimes it will be a primary industry, sometimes an important branch of manufacturing. The essential feature of the situation is that the immediate profits of expansion seem great to

¹See A. T. K. Grant, *A Study of the Capital Market in Post-War Britain* (London, 1937), pp. 212 *et seq.*

all the individual concerns competitively engaging in this line of business; so that collectively they exert an overwhelming and unjustifiable attraction upon whatever capital supplies are available. Under these circumstances a general credit restriction would be likely to check solid and deserving industries before exerting the required effect upon the runaway. Another possibility is that in times of stagnation certain fields of investment seemingly deserve, whether on purely commercial considerations or on grounds of public policy, more direct encouragement than can be afforded by means of a general policy of easy money.

Distinction between Current Interest Rates and Contracts. It is necessary to differentiate current interest rates upon current borrowing and lending from interest payments currently being made under contracts concluded in the past. This differentiation may be explained to those unfamiliar with it by a simple, if exaggerated, illustration.

Suppose that today a man buys from the Government a perpetual debenture for its face value of \$1,000. If the payment to be made on that security is at the rate of 4 per cent, he will get \$40 per annum as long as he holds it. Presumably, if he is willing to buy and the Government to sell on those terms, the "current rate of interest" on that form of borrowing is 4 per cent. Suppose, however, that by the end of a year the market price of securities of that sort has sunk to \$500. This is tantamount to saying that the rate of interest on that type of security, bought and sold at the new price, is 8 per cent: i.e., \$40 per annum on an outlay of \$500. In short the current rate has risen to 8 per cent. But, although the level of market rates of interest may have changed, in this instance doubled, the Government continues to pay to whoever holds that security an annual sum of \$40. Thus the contractual payment remains constant for the duration of the contract, while at the same time the interest rate to be currently obtained from the investment of funds in that or other similar contracts may alter continuously. A separate chapter (xii) is devoted to the problems arising out of immobile interest contracts and debt structures in the volatile economies of the Dominions.

(2) EFFECTS OF INTEREST AND CREDIT CONTROL IN VARIOUS FIELDS OF FINANCE²

Bank Loans. The rates which banks charge for short term loans are not generally considered to exert much influence upon the policies of business men, because the cost of bank loans is usually an inappreciable part of the total cost of doing business. In so far as this is so, periodic changes of these rates will not affect businesses in particular or the state of business in general. However, when banks do alter their rates it usually reflects a change of attitude towards the extension of loans; and such changes of attitude may be of considerable importance. To some businesses, a change of rates might by itself be a matter of real concern, for instance to the businesses of professional dealers and speculators in commodities or securities who usually obtain most of their funds from banks; but even here the *attitude* of the banks is likely to be of greater influence on the volume of borrowings than the *rates* which they charge. Accordingly we shall focus our attention not upon rates, but rather upon the effects of the changing attitudes and policies of commercial banks, assuming that at appropriate times they may alter their rates in order to make their general policies somewhat more clear and effective.

If, as suggested above, most businesses normally depend but little upon bank loans, it might seem to follow that changes in the credit policies of banks, like changes in their rates, would be of little general importance. In fact, however, many if not most businesses must depend upon the banks, either directly or through some intermediary, at some stage and often at a crucial stage in their careers. This is true of many concerns in their early days; and others are later reduced to dependency by bad luck or bad management. The policy of the banks may be very important and perhaps decisive in the initiation of new enterprises and in the rescue or expansion of old ones. If their attitude is relatively harsh towards those dependent upon them, if their credit policy is restrictive and their rates are high, they will exercise a generally repressive effect upon business; contrariwise, they may be encouraging.

Agricultural areas as well as industrial may feel the direct effects

²Most of the material in this section has already appeared in the *Economic Journal*, vol. XLIX, no. 194, June, 1939. It is reproduced here by kind permission of Macmillan and Co., publishers, and the editors of that Journal.

of the credit policies of the banks. This is especially true of the Dominions in the Southern Hemisphere where the banks engage extensively in what amounts to long term lending in rural districts. It is less true in Canada where the banks try to confine their lending to the seasonal needs of their rural clients. In all four countries the policies of the banks may be especially important when a district is changing or diversifying its agricultural interests, when mixed farming is entering a wheat area, or when great sheep stations are being broken up into smaller units for the production of wheat or dairy products. When a new area is being opened up for the first time, it may be difficult for banks to find a sound basis for the extension of credit, and bank policy may play a minor role; but when an area is already settled and its possibilities are fairly well appreciated, the policy of the banks may be most important in facilitating or retarding alterations in the nature of its stock and capital equipment.

Some theorists have found in periodic alterations of the volume of bank loans or in consequent alterations of the volume of bank deposits the chief cause of cyclical fluctuations of business. Put in this way the claim seems exaggerated; indeed, if one had to choose whether the credit policies of commercial banks were the result or the cause of business fluctuations, it would probably be preferable to consider them the result.³ In countries such as the Dominions, where prosperity is so dependent upon foreign markets, it would be specially indefensible to suggest that the movement of bank loans or deposits was a dominant causal factor in the business cycle. Practically all bankers feel that their attitudes and policies are altered simply as a result of alterations in the general conditions and prospects of business and in the specific affairs of their customers. Nevertheless credit policy may be an important factor aggravating or mitigating the cycle. An extension of bank loans, it must be recalled, may be a decisive factor in allowing certain businesses and industries to start or to expand; a rigorous restriction of credit may have the opposite effect. Moreover, an extension of credit may support bullish speculative activity; while drastic

³For a development of this view see A. F. W. Plumptre, "Central Banking Machinery and Monetary Policy" (*The Canadian Economy and Its Problems*, edited by H. A. Innis and A. F. W. Plumptre, The Canadian Institute of International Affairs, Toronto, 1934, pp. 198-9).

restriction will precipitate a liquidation of speculators' and dealers' stocks and a decline in the prices of commodities and securities. The influence to be exercised by the banks acting in concert is appreciated by a small but increasing number of bankers who naturally look to the new central banks for leadership.

It is probable that periodic changes in the liberality of commercial bankers are of less importance in Canada than in the other three Dominions. There are three or four lines of argument which support this conclusion. First, because the Canadian banks have apparently been less willing to extend long term agricultural credit they do not occupy so strategic a position in regard to the development or reorganization of agricultural areas. Secondly, the relatively advanced state of the Canadian security market must in some degree free Canadian industries from dependence upon the banks, while at the same time giving to the banks a field for more liquid (in the sense of more marketable) investment than is available in other Dominions. Thirdly, the Canadian economic and financial system seems to have reached that stage of development, already reached in the United States and Great Britain, where a long run decline in demand for bank credit has set in;⁴ while the other Dominions do not seem to have reached the same stage. Just how far the downward trend is caused by the development of the capital market (how far this third point is the same as the second), and how far it is caused by changes in the economic structure, cannot be determined here. Fourthly, some Canadian borrowers have access to bank credit in neighbouring American cities. Instances would most easily be found amongst those who speculate in wheat or securities. Moreover, the development of branch plants of American concerns, which can secure accommodation either north or south of the international border, results in this very important section of Canadian industry being much less dependent upon Canadian banks than it otherwise might have been. In other Dominions—and in Canada as well—borrowers may have access to accommodation in London; but the facility with which Canadians may seek American sources of credit is unique.

Other Short Term Lending. In all the Dominions the commercial banks are by far the most important institutions in the field of

⁴J. Douglas Gibson, "The Changing Character of Bank Assets" (*Canadian Banker*, vol. XLV, no. 2, Jan., 1938, pp. 151-4).

short term lending; but there are others, not so directly susceptible to central banking influences, which deserve mention. For the most part these others lend to individuals, to finance either consumption or speculation. The finance companies, which support the purchase of all sorts of goods on time-payment or hire-purchase plans, have grown very rapidly. Because their facilities are chiefly available in relation to the purchase of such durable consumption goods as automobiles, radios, sewing machines, etc.—the demand for which exhibits a marked cyclical variation—there can be little doubt that the operations of companies of this type do serve to aggravate cyclical movements of business. But there is no reason to suppose that the rates of interest which they charge are factors of importance. True, there are plenty of complaints expressed regarding their rates; but these refer to their excessive height and not to their movements. Actually the rates are probably fairly stable.

The policy loans of life insurance companies are of considerable importance, especially in Canada and South Africa. In all the Dominions they are a source of emergency accommodation for individuals and, in some degree, for small family or personal businesses. In South Africa they are, in addition, one of the chief sources of credit for speculation on the stock exchange. Life insurance companies usually disapprove, at any rate officially, of policy loans because they impair the estate of the borrower in the event of his death; but the disapproval has not been strong enough to prevent the growth of this type of lending in recent years. Moreover, under the terms of many policies the policy holders have the right to demand loans up to a specified maximum. Often a maximum rate of interest chargeable on these loans is also specified; and the actual is almost invariably the maximum. Thus there is a strong factor militating against movements of interest rates on this type of borrowing. Nor is it likely that movements of interest rates would greatly affect the volume of borrowing; for the loans are contracted either in time of borrowers' emergency or else in the hope of using the funds to make speculative profits of much greater proportions.

Deposits. Movements of the rates on various types of deposits seem to excite less public emotion than movements on bank loans. Perhaps it is that widows and orphans are not sufficiently vocal in

the face of reductions in rates; or that nobody pays sufficient heed to their financial spokesmen. Nevertheless, deposit rates are not without their significance. The rates paid on some types of deposits, notably those in which businesses hold their temporary surpluses, bear a competitive relationship to the rates on short term gilt-edged securities. Movements of deposit rates are likely to be reflected in the yields of such securities, and the converse is also true, although the reaction in this case is not likely to be nearly as sensitive. Where there is anything of a market in treasury bills, these are the securities whose yields are likely to be most intimately associated with deposit rates.

Certain other results are sometimes quite wrongly associated with movements of deposit rates. In some quarters the belief still lingers that when the banks and other institutions lower their rates deposits will be withdrawn wholesale. This might be true of an individual bank which alone lowered its rates; but for a banking system as a whole it is most unlikely (as long as the deposit rates do not fall below zero). While the existence of rates of interest on deposits may still, in rather backward rural areas, be a factor tempting people to bring out hoards from under the mattresses or behind the chimney corners, there is little likelihood that reductions of rates would produce an appreciable tendency to revert to hoarding.⁵ The only real threat to the volume of deposits is that reductions of rates may lead certain business men and financiers to transfer their balances abroad; and this (in those Dominions in which a policy of stable exchanges with London or New York is maintained) would indeed result in a loss of deposits and a loss of foreign funds by the banking systems. If the movement seemed to be of importance, it might be checked by offering special concessions to those contemplating the removal of their balances. Apart from this eventuality, the banking systems of the Dominions need have little fear in varying deposit rates to suit local conditions.

So much for the effects of interest and credit control on short term lending of various sorts. Now we turn to various fields of long term finance.

⁵This statement would probably be acceptable to most economists. On the other hand, it is interesting to note that reductions of interest rates in the United States were considered to be one of the probable causes of increased hoarding. See the *Federal Reserve Bulletin*, vol. XXIV, no. 12, Dec., 1938, p. 1033.

Frontier Finance. Young countries develop by leaps and bounds.⁶ Their periods of economic expansion are associated with the introduction of new techniques of production and transport and with the exploitation of virgin natural resources. The gold rush, the land boom—these are characteristic. Rapid changes in the population take place: changes in its location and changes in its age and sex distribution. There is a consequent alteration in the needs for public utilities—schools and roads and hospitals and offices—and in the needs for governmental machinery. Quite a short period of development may be revolutionary in its redistribution of prosperity and political power. The outcome of each spasmodic burst is beyond rational prediction. It is a matter for unbridled optimism and unleashed activity amongst political and business leaders alike. There can be no nice comparison of costs with revenues (along the lines portrayed by economic theory)—that is, comparison of the costs of projected capital development in terms of interest obligations with the revenues to be derived from expansion. "It would be heresy to ask whether rapid development which involves mortgaging the resources of a young country is desirable. New countries are not in a position to ask whether capital investments are sound in the long run. They proceed in an atmosphere of boundless optimism on the assumption that there are no limits to the country's possibilities."⁷

It is not surprising, in view of such considerations, that we find economists in the Dominions stating or implying that the rate and course of development are not susceptible to (normal) movements of interest rates.⁸ The nearer one draws, historically or geographically, to the frontier development the less significant will be the

⁶The material in this paragraph is summarized from a more extensive treatment of the subject. See A. F. W. Plumptre, "The Nature of Political and Economic Development in the British Dominions" (*Canadian Journal of Economics and Political Science*, vol. III, no. 4, Nov., 1937, pp. 489 *et seq.*)

⁷H. A. Innis, *Problems of Staple Production in Canada* (Toronto, 1938), p. 56.

⁸See, for example, H. W. Larsen, "Banking in New Zealand" (thesis presented for the M.A. degree to the University of New Zealand, 1936, typescript); also Evidence presented by L. G. Melville, Economist of the Commonwealth Bank of Australia, to the Royal Commission on Monetary and Banking Systems in Australia in May, 1936, published by the Bank, p. 9; also J. T. Bryden, "The Effects of Movements of Interest Rates" (*Canadian Journal of Economics and Political Science*, vol. III, no. 3, Aug., 1937, pp. 434-9).

rate of interest charged to borrowers. On the other hand, the attitude of those with free capital to dispose of will be of crucial importance. Alterations of this attitude are specially unlikely to be adequately or accurately reflected in general movements of interest rates where frontier development is concerned because each project of development is likely to be unique, a matter to be judged (in so far as this is possible) on its own prospects.

In general, the rewards of pioneer capital development are so uncertain that the funds have to be secured in one of four ways: (1) As a speculative venture, with the investor taking a clear equity interest rather than a creditor interest. (2) As a loan guaranteed or issued by the Government and in effect secured, not on the specific resources to be exploited, but on all the resources of the country, known and unknown. A variant of this is the heavy subsidization of private capitalists by the Government—in the form of monies, lands, etc.—to the point where private lending at current rates seems a good gamble. Such is the story of much of the railway development of the North American continent. (3) Capital may be accumulated and reinvested by those actually engaged in developing the frontier; who, finding themselves in remote agricultural or mining districts, have little alternative but to plough back their surplus rewards and little interest in investments lacking the speculative possibilities of the frontier. (4) Funds may be lent by large institutions such as banks, with branches or agencies on the frontier, in the belief that they have sufficient knowledge in their branches or directorates to prevent severe losses. In none of these four cases is it likely that variations in the current level of interest rates will directly influence the volume of borrowing and the rate of economic development: in all of them the estimates, the guesses, of a relatively small group concerned with frontier finance are likely to be of decisive importance. If this group is within the country the persuasive influence of the central bank may give it some control over the trend of events. If the group is situated abroad the difficulties of the central bank are still greater.

The fact that so much frontier development has involved government initiative, government grants, or government guarantees may suggest that, after all, interest rates are factors of importance. Surely, if Governments had not had access to relatively low rates, less responsibility would have fallen upon them? The refutation

of this suggestion lies in the predominance of the lenders' general attitudes and estimates over the rates of interest involved. Willingness to lend to Governments, which could tap the income from wide areas and diverse resources, has been much greater than willingness to lend to private pioneer borrowers; a natural propensity which has been encouraged in the London market by the preferred position given to the Dominion Governments under the Colonial Stock Act. These Governments have been absolutely essential links in facilitating the flow of capital into undeveloped regions and industries. Without their intervention and assistance, private borrowers for the most part simply could not have raised the capital; even had private concerns thought themselves justified in offering bonds yielding very high returns—15 or 20 per cent—this would have frightened rather than attracted investors. We are left, then, with two conclusions: first, that the matter of rates has not been, in any direct sense, a deciding factor in determining that Governments should play a very important role in frontier development because it was usually government intervention or nothing; and second, that for the Governments themselves changes in rates have been only one indication, and probably not a very influential one, of the prevailing liberality of the lending group. Thus, if variations of rates have been only a minor reflection of the changes of opinion amongst lenders, and if, as we have previously suggested, the borrowers have not been in a position to weigh the costs of development against its possible revenues, we are led to conclude that neither the supply of loans nor the demand has been responsive to—dependent upon—the rate of interest. In short, interest rates cannot have played much part in determining the amount of borrowing. When lenders felt inclined to lend, they did so, and between two successful borrowers the spread of rates might roughly reflect the degree of risk which the lenders attached to each; but there was no guarantee, no likelihood, that the borrower offering the highest rate would get the loans he sought nor that all the borrowers' demands at current rates would be met.

Secondary Industries. The Dominions are no longer accurately described as young countries; they are only fairly young, some rather older than others, but all having lost their extreme immaturity and simplicity of economic organization. We are led to turn, then, from the development of frontiers, with its emphasis

upon the extractive industries and the problems of transport, to the development of secondary industries. Here we might expect to find interest rates and intelligent credit policies exercising much greater influence over the course of expansion; for rational prediction seems much more possible. Moreover, secondary industries seem to have a relatively secure source of labour and resources (in the form of raw materials), they seem to be faced by relatively stable demands, and their expansion, while of great social and economic significance, is not likely to be so rapid, so revolutionary, and so unpredictable in its general effects.

The actual influence of credit policies and interest rates over the rate of development of secondary industries is, however, not quite that which the foregoing considerations suggest. At times, certainly, the willingness of banks or other financial groups to provide credit to finance extensions has been of decisive importance; but in this regard it must be remembered that "the banks" and "secondary industry" are by no means two entirely separate groups. The interlocking of directorates is only a formal evidence of the many ways in which collaboration takes place between finance and industry. The decision to move forward, the decision to mark time or even to retreat, is often taken in collaboration; and when it is taken prevailing rates of interest are likely to be a matter of some importance, but not of primary importance.

Further, in many cases, perhaps the majority, no reliance upon banks or financial groups has been necessary. Expansion has been financed by means of ploughing back profits. This process of ploughing back takes place in a piecemeal and semi-automatic fashion; theoretically, of course, a board of directors or salaried manager might consider whether it was better to plough back or alternatively to invest accruing surpluses in interest-bearing securities issued by Governments and other industries, but actually it is doubtful whether this sort of decision has played an important role in directing the course of expansion. It is specially doubtful whether such decisions have been important in the development of family enterprises and proprietary companies in which forms the greater number of the Dominions' manufacturing businesses have grown up. In so far as any business is profitable, it expands automatically, feeding upon its own profits, and often largely

regardless of changes in the cost of borrowing or of changes in the credit policies adopted by financial institutions.

Tariff rates rather than interest rates and credit policies have been dominant factors in regard to the expansion of secondary industries in the Dominions. To the greatest extent in Canada, and to the least extent in New Zealand, they have served the national policies of economic diversification. As one of the early tariff enthusiasts in Australia put the matter: "To live on the back of a merino sheep is easy but it is not inspiring."⁹ Protection has resulted in industrialization and in urbanization and in the development of local capital markets. Many family concerns, many proprietary companies, have become public companies with shares widely distributed—much more widely distributed than the control. The dependence of individual enterprises upon their own profits as a source of expansion is not so great as it used to be; nor is their dependence upon the banks. It may be that these latter-day changes are resulting in more attention being paid to interest rates when development is under consideration; especially in Canada where issues of bonds and debentures are sometimes used to secure industrial capital.¹⁰

On the other hand, in recent years also, other factors have been militating against the growth in importance of interest rates. These are the increasingly rapid rate at which technical change seems to have been occurring and the increasingly unstable state of economic and political conditions in most countries. Both are forces which lead business men to take a short view of affairs; to refrain from extensions unless these hold some likelihood of being so profitable as to repay the whole of the original investment in a relatively few years. With the allowance for obsolescence and associated matters occupying a larger role in business men's considerations, other matters, including allowance for interest, occupy positions of less decisive importance.

⁹The *Sydney Bulletin*; quoted by Herbert Heaton in "The Development of New Countries: Some Comparisons" (*Minnesota History*, vol. X, no. 1, 1929, p. 14).

¹⁰Sometimes, but by no means always. In Canada (as in Great Britain: cf. Grant, *Capital Market in Post-War Britain*) the new issue market in bonds, and to a lesser extent in stocks, is chiefly a channel through which going concerns are sold to the public or existing bank loans are refinanced.

Governments and Local Authorities. We may distinguish roughly between those borrowings of Governments and local authorities which are for emergency purposes, such as unemployment relief in a severe depression, and those for developmental purposes. The former are little responsive if at all to variations of interest rates; although very high rates combined with the warnings of sound finance may steel the wills and harden the hearts of politicians in the enforcement of rigorous economies. Whether strict economy in bad times is desirable is discussed in Chapter XVI.

Expenditures for developmental purposes,—that is, for purposes of a productive if not revenue-producing character—may be to some extent altered by such changes in interest rates and general credit conditions as a central bank may produce. This is not likely to be the case in any marked degree if the development is on the frontier and concerns the exploitation of virgin resources. If, on the other hand, it is on a less ambitious scale, and if it is undertaken in a well-settled district where the economic possibilities are ascertainable, there may well be some comparison, albeit not very clear or close, of the interest obligations incurred by public works over against the necessary increase in tax burdens. Higher interest rates involve higher taxes, and act as a deterrent to expansion: generally tightened credit conditions may well prevent it outright.

It may well be, although at first sight it appears unlikely, that the borrowing of local authorities, municipalities, boards, etc., is generally undertaken on a sounder, more intelligent financial basis than the borrowing of Governments. This appears unlikely because the political leaders who reach the higher seats of government are for the most part of a higher calibre, and so are the civil servants employed by them. It may be, also, that there is more room for graft and petty politics in the less important bodies; although the field for muck-raking is by no means confined to them, and the bigger issues provide the juicier plums. But over against these considerations there are others which seem to decide that the smaller bodies borrow more intelligently. The smaller units, with their lesser horizons and lesser projects, have a better opportunity to take all the relevant matters into consideration. Moreover—and this is the important point—they are usually forced to give these matters consideration. They have less ready access to the open capital markets; and in their search for capital they may have

to reply satisfactorily to the questions of large investment intermediaries (for example, insurance companies)¹¹ on the one hand and of supervisory government departments on the other. The investment intermediaries are likely to take a more independent and exacting attitude in the face of the smaller, less powerful borrowers. The supervisory government departments usually lay down certain rules to guide the borrowing of their subject boards and local authorities, rules which frequently are much more rigorous than those that the Governments apply to themselves; and this is specially the case in regard to provision for sinking funds. Further, the systems of accounting and taxation are usually such as to make the effects of interest payments upon taxation specially clear in the case of local authorities; for it is their custom to apportion their taxes upon an ascertained object (the assessed capital or rental value of real estate), and it becomes clear immediately that such and such an increase in interest costs would raise the tax rate by such and such an amount. For all these reasons it seems probable that the borrowing of local bodies, particularly in well-settled districts, is done on a rather more business-like basis than is to be found, perhaps than is possible or even desirable, in the case of Governments. Accordingly interest rates and general credit conditions are probably more influential.

The conclusions of the foregoing paragraph, while almost certainly applicable to Canada, and probably also to South Africa and New Zealand, need some modification in respect of Australia. This is on account of the Loan Council; and the Financial Agreement whereby the long term borrowing of the six Australian states and the Commonwealth has been consolidated under the jurisdiction of that Council. Its approval is legally necessary for all long term issues of these Governments, and the Commonwealth Bank has since 1931 refused to take up treasury bills unless approved by the Council. At meetings of the Council the several states are usually represented by their Premiers who are also their Treasurers, and the Commonwealth is usually represented by the Treasurer who has two votes plus a casting vote. Each of the seven representatives is naturally interested in ensuring that, while his Government

¹¹See, for instance, J. T. Bryden, *Municipal Credit from the Standpoint of the Investor*, a paper delivered to the Ontario Municipal Association Aug. 30, 1939, and mimeographed by the North American Life Assurance Co., Toronto.

gets its fair share of whatever money is raised, no other Government gets an unduly large proportion. The result is a more careful scrutiny of proposals for government borrowing than would otherwise take place. On the other hand, the effect may have been to encourage laxity instead of strictness in the borrowing of local authorities and semi-government boards conducting public utilities of various types. These authorities and boards are beyond the control of the Loan Council. In 1937, and even more conspicuously in 1938, New South Wales and other states which were dissatisfied with their quota of funds under the Financial Agreement have given independent borrowing powers to existing boards and set up other boards with similar powers. There is thus a tendency to throw upon local authorities some financial responsibilities that might otherwise—perhaps better—be undertaken by the states. We may conclude that, under the peculiar arrangements existing in Australia, the states have bound themselves to a rigorous financial régime, including strict provisions for sinking funds, while some borrowing, of a nature considered dubious by a majority on the Loan Council and by the Commonwealth Bank, is being shifted on to the shoulders of local authorities and boards. Under these conditions it is not unnatural that a movement has been undertaken to increase the influence of the Council over the borrowings of semi-governmental bodies; but in the middle of 1939 it is not clear how far this will be successful in the face of determined opposition in independent quarters.

(3) CONCLUSION

Summary of Effects of Control in Various Fields. We may conclude that in none of the fields of short term finance which have been surveyed are movements of interest rates likely to be very important influences on the volume of borrowing and lending. A central bank may well, however, influence the attitude of commercial bankers towards extending loans in general and in particular directions; exercising its influence either by means of persuasion or by altering the banks' reserves or both. Such influence is likely to produce an important effect upon the economic system because the banks touch so many businesses in vital moments and vital places. Especially is this true in the Dominions other than Canada, because in those countries industry and commerce have less easy access to other

sources of funds and because agriculture is traditionally far more dependent upon banking accommodation.

As for variations in the short term credit extended by other financial institutions, it is clear that in some cases this is an appreciable factor in aggravating cyclical movements. This is especially clear in the case of institutions financing time-payment and in the case of the activities of South African insurance companies regarding policy loans. Since a central bank has no means of operating directly upon the financial positions of such concerns, and since such interest rate movements as it secures are not likely to be very effective, the only direct means of control lies along the line of persuasion. In so far as these institutions are dependent upon banks, and in the case of time-payment finance companies this is not infrequently the case, and in so far as the banks are amenable to central banking influence, pressure may also be brought to bear along this line.

When we turn to long term financing we must also distinguish between a number of different forms and objects of finance. In regard to frontier developments, it has been shown that the rates of interest on securities are not a factor of great significance. The rates or yields payable on outstanding issues are no true criterion of the rates at which new financing can be arranged; and even in the arrangement of new financing the rate stipulated is not likely to be a primary consideration. Thus a central bank's influence over the current yields of high grade securities is not likely to be of much avail in these quarters. Something may be done by persuasion exercised in appropriate quarters, assuming that the officers of the central bank can retain their equanimity, remaining unaffected by the general tides of optimism and pessimism upon which frontier fortunes always ride. But the tides are usually so strong that they are likely to sweep past central bankers even if they are able to maintain their stand on the rocks of reason.

A central bank's influence over long term security markets may be rather more important in relation to secondary industries. This will be specially true in the case of the better established, less risky enterprises which, by recourse to the open capital markets, increasingly seek emancipation from the banks or from the limits set by their own profits. The prices and yields at which their securities can be sold is a matter of concern when financing or re-financing is

under consideration. On the other hand, the growing uncertainty of economic affairs and the growing rapidity of obsolescence of specialized machinery appear of increasing significance to those who consider raising funds; and thus the rate of interest and current security prices appear of less account. This being so, the central bank may have to rely, once more, chiefly on personal persuasion, either over the would-be industrial borrowers or over the financial groups which take up or float securities.

In regard to the borrowing of central Governments, the advisory influence of the central bank must be mentioned first; for one of the chief purposes of a central bank is to advise its Government. In addition, however, the central bank may exercise direct influences upon the prices and yields of government securities. Changes in the cost of borrowing will not have much effect in times of emergencies; but in more normal times, and for purposes where the results are more predictable than in the case of frontier developments, the borrowing of Governments may be affected by prevailing interest rates.

As for the borrowings of local Governments and boards, usually these are fairly closely regulated and scrutinized. The result probably is to make them fairly susceptible to movements of interest rates and general credit policies, although not when the borrowing is for emergency purposes. The central bank may also exercise a persuasive influence over the local authorities, and over the financial institutions which sponsor or take up their security issues. Thus, under favourable circumstances, the influence which a central bank may exert in this field of finance is by no means inconsiderable.

Policy in the Business Cycle. Taking all these fields of influence into consideration it seems clear that, if a central bank can achieve its immediate objectives in moulding the behaviour of certain important sections of the financial system, it may also go a considerable way towards influencing the volume of financing, the amount of investment, and the general conditions of business and prosperity in the community. Thus the policy of the central bank should apparently be the orthodox one: to make credit conditions as easy and interest rates as low as possible in a period of decline or stagnation, and to raise rates and restrict credit, especially in the direction of any runaway industries, when an inflationary boom seems to be developing.

Such a policy, it must be added, is not quite as easy as it seems; because it is practically never possible, not even for central bankers, to be certain of the current trend of business. It is seldom unequivocally clear, except perhaps in the deepest depression, what phase the business cycle is passing through; and thus it is never certain how far the accelerator or how far the brake is required. Moreover, different people are prone to regard inflationary or deflationary policies with different degrees of dislike or affection, depending upon their personal interests, their social and economic backgrounds, and the teachings to which they have been exposed; and thus their decisions regarding the proper time to accelerate or brake will differ.

However, such difficulties, which may be less in the relatively simple economies of the Dominions than in more complex countries, are not insuperable. Moreover, there is another line of argument in favour of the orthodox policy of fluctuating rates during a credit cycle. This is a political one. It is desirable that, in times of recession and stagnation, the interest costs of hard-pressed borrowers should be reduced. The reduction of current rates is helpful; but it may be necessary, especially in areas of primary production where prices are likely to fall catastrophically, also to reduce interest contracts (see Chapter XII). The general reduction of interest will provide a welcome relief and will probably be regarded as a Victory for the People over the grasping Financial Oligarchy. On the other hand, if capitalism is to continue, interest rates cannot sink progressively to zero. If rates are always to be reduced for political and economic reasons in bad times, they must move in the opposite direction in good times. What comes down must go up.

It is worth while to say a word of disapproval regarding two policies which have been all too widely endorsed in financial circles during the past few years. First, during the period of low rates which extended over most of the nineteen-thirties, it has frequently been said that low rates are actually harmful in a period of slack business because, so it is argued, people will not invest money in new enterprises unless the yield promises to be large. Therefore low rates discourage new enterprise. It is doubtful whether anyone who has given serious thought to the problem would subscribe to this doctrine. No one will commit the error who remembers that a period of low interest rates means, obviously, a period when

borrowers *can* obtain loans cheaply; and a period of high rates is one in which borrowers *cannot* obtain them cheaply. It is nonsense to say that borrowers will be encouraged to expand their activities because they have to pay dearly for their loans. Every lender would like to be able to lend at rates as high as possible; and the higher the rates the more he might be willing to lend. But the existence of low rates proves that there are, at the moment, lenders who are willing, although they may not be delighted, to lend at those rates. If the amount of borrowing at those rates seems undesirably low, it is not because lenders are unwilling, but because borrowers are unwilling.

New borrowers certainly cannot be tempted by *increasing* current rates. To suggest that they can is as pernicious as it is muddled. For if current rates of interest are raised to a high level, borrowing will be diminished, investment discouraged, the flow of incomes and purchasing power retarded, the yield on past investments lessened, and the incentive to new investment still further reduced. The original spirit of under-investment is thus reinforced by seven others more wicked than himself; and the last state is worse than the first.

There is a second policy regarding interest rates that has been defended as traditional and desirable by a number of financial leaders in the Dominions. Bankers and others have claimed that stability in their published rates of interest increases the confidence of borrowers both in the banks and in the future.¹² Accordingly they have opposed any policy which involved movements of rates. There is no doubt that violent variations in rates would be unsettling to borrowers. On the other hand, we have already seen that variations in rates and credit policies may serve desirable social ends; and there seems no reason why variations in the prices of (rates on) different forms of credit should not accompany changes in current supply and demand for them. Nowadays the whole pricing system is subject to increasing interference on the part of Governments and monopolistic groups; but the working of the economic systems of the Dominions is still basically dependent upon

¹²See the quotation from Canadian sources on p. 298 below. Also the arguments against the traditional policy of stable rates in South Africa advanced by C. G. W. Schumann, *Structural Changes and Business Cycles in South Africa, 1806-1936* (London, 1938), pp. 281-3.

price movements. Movements of prices and profits guide labour and resources from the employments where the demand is less to those where it is greater. Rates of interest, as factors in the general price system, are still basic to the distribution of capital resources. Those who have argued for stable rates have for the most part been members of select creditor groups; and it is more than likely that stable rates meant, for them, high rates. (In fairness it must be added that those who argued for lowered rates have chiefly been spokesmen for debtor Governments.) Certainly, if Canadian experience is a fair example, the leaders of financial institutions were much more disposed in favour of stable published rates in the early nineteen-thirties, before rates had been forced down to low levels, than they were at the end of the period.

CHAPTER IX

OPEN MARKET OPERATIONS

(1) INTRODUCTION

IN the last chapter we explained the influences which changing interest rates and changing credit policies might exert upon the extent and direction of economic activity. In this chapter and some succeeding ones we examine the ways in which the Dominion central banks may produce changes in rates and credit policies. Our immediate concern is with open market operations.

The operations of a central bank in the open security market may have several effects. These were described in section (3) of the Introduction and need no extensive recapitulation. It should be recalled, however, that the primary effects will be upon the prices and yields of the securities bought or sold by the central bank and upon the cash reserves of the commercial banks. The secondary effects will follow from the actions which the commercial banks are induced to take as a result of the alteration of their reserves. As circumstances permit the banks may either expand or restrict loans or they may alter their purchases of securities. In point of time the primary effects come first; but in point of volume the secondary effects may be of greater significance, and this will inevitably be so if the commercial banks work to some customary proportion, such as one to ten, between their reserves and their deposit liabilities.

The success of open market operations, that is to say the degree to which a central bank may rely on them to make interest rates and the credit policies of financial institutions conform to its purposes, depends primarily upon two factors. The first is the nature of the security market. In Part I we have already suggested that the capital markets in some Dominions are not sufficiently broad for regular central banking operations. The second factor contributing to success is the maintenance of a fairly stable cash reserve ratio on the part of the commercial banks; because this ensures that these banks will reinforce by several fold the expansive or restrictive operations of the central bank. Thus in this chapter on open

market operations we shall pay special attention to the state of the Dominions' security markets and to the habits of their commercial banks in regard to cash ratios.

(2) CANADA¹

Extent of the Market. When the erection of a central bank in Canada was under consideration many people, and particularly those who were unfavourable to the innovation, put forward the opinion that such a bank would be a failure partly because of the inadequacy of the Canadian capital market. These predictions have not been fulfilled. The bond market has been sufficiently broad not only for the central bank's operations but also to allow the commercial banks to respond by purchasing securities in substantially larger amounts.²

However, in fairness to the pessimists of the early nineteen-thirties, it must be added that the Canadian market in government securities has altered since that time. In particular there has been a very great increase in the outstanding amount of short and medium term issues (less than ten years to maturity). The Dominion Government has purposely altered the average term of its debt in this way. The chief object has no doubt been to take advantage of the lower interest rates to be obtained on the shorter term issues; for in Canada, as in the United States and Great Britain, short term securities, with their early maturities and stable values, have been in greater demand than long since the depression began in 1930. In part, however, the Government and the Department of Finance may also have had the needs of a central bank in mind when issuing just the type of security in which it could most readily deal. The issue of marketable treasury bills by tender, which began in 1934, no doubt came of similar motives—predominantly to obtain lower interest rates but secondarily to facilitate the operations of a new central bank.

¹Much of the material in this section has already appeared in the *Canadian Chartered Accountant* (Dec., 1938) and is reproduced here by the kind permission of the editor of that journal.

²See the evidence given by the Governor of the Bank of Canada to the House of Commons Committee on Banking and Commerce, 1939, p. 624: "I believe that in no country and at no time have there been bank and market responses to central bank action and central bank policies, more complete, more full, and more in line with anything that a theorist might have anticipated, than have taken place in Canada."

A similar but not identical pair of motives can be found in the retirement of "optional-payment bonds."³ Although the majority are still outstanding many have been refunded into issues payable in one centre only. Their high nominal or coupon yield has made them specially popular with certain groups of investors in a period when low nominal yields have been abundant. Thus an increased investment demand has combined with a diminished quantity available to remove most of the floating supply from the market. The Canadian bond and foreign exchange markets are therefore less susceptible to international movements of these securities than they used to be in the early nineteen-thirties; and the facilities which the markets offer to central banking control are so much the better. The refunding of these "two-pay" and "three-pay" bonds has been undertaken by the various borrowers in order to avoid a repetition of the special burdens which these securities imposed upon them in the period of fluctuating exchange rates (1931-4); but the refunding of the federal Government's obligations (many of the post-War bond issues guaranteed for the Canadian National Railways bore optional payment features) should also be regarded as part of a policy to protect the Canadian bond market and foreign exchange rate from undue influence from abroad.

One further trend in the bond market must be noted; and this one adverse to breadth and central banking control. This is the tendency for bonds to become concentrated in the investment portfolios of large financial institutions. The investment dealers have largely given up holding portfolios, and nowadays act almost entirely as brokers between the large institutions. Their change of policy has been partly the result of the low yields obtainable from a portfolio in comparison with the rate on bank loans. With the relatively small turnover of recent years it is not worth while for them to borrow at 4 per cent and bear the risk of fluctuating bond values if the yields obtainable are almost invariably less than 4 per cent. The low yields have also been a factor in driving private and corporate investors out of the high grade bond market. So much for the groups which have been reducing their holdings. As for the financial institutions, and especially the banks, whose holdings have increased, here a changing attitude towards government bonds is

³For explanations of the nature and influence of these securities see chap. IV, section (2), and also chap. XVIII, section (2).

to be noted. There is a growing scepticism towards the liquidity, the marketability, of government securities. This is based partly upon the belief that heavy sales might result in political intervention, partly upon the suspicion of each investor that the others think along the same lines as himself and would thus be selling at the same time.

Participation of the Central Bank. The Bank of Canada is an active participant in the market for Dominion Government bonds. Successive weekly statements often show alterations of several million dollars' worth in its holdings. Its operations are no doubt undertaken primarily to implement its general policies; but they serve other purposes as well. Most important, through its daily activities the Bank is kept closely in touch with the market in a practical way, thus providing itself with an invaluable source of first-hand information. This is essential not only from the point of view of its own business and policies, but also in connection with its duties as financial adviser of the Dominion Government. Moreover, the continuity of the Bank's purchases and sales tends to cover up, for a short time, the direction in which its dealings are on balance tending. This is important because otherwise other dealers might immediately discern how to make profits by operating in advance of the Bank's policies to raise or lower security prices.

The Bank's operations serve in some degree to broaden the Canadian bond market. In this regard its activities may be rather more important than the published figures indicate; because, according to dealers, the Bank has at times offered to undertake "switching" operations—trading one type of government bond for another. Switching is a useful form of participation in the bond market because it keeps the Bank in touch with affairs, and meets the demands of other traders, without involving the Bank in any change in the aggregate of its security holdings or in the reserves of the commercial banks. Further, it is said that the Bank regards switching operations as means of correcting such spreads between the yields of various government securities as it believes to be undesirable or unjustified. Whether the Bank's operations have actually added much breadth or stability to the market is a matter of opinion and not wholly agreed between those who regard the Bank with favour and disfavour. At the least the Bank must be one more dealer in the market; and it is probably more than this because the other

dealers are inclined to give its daily price lists and its other activities more than ordinary attention.

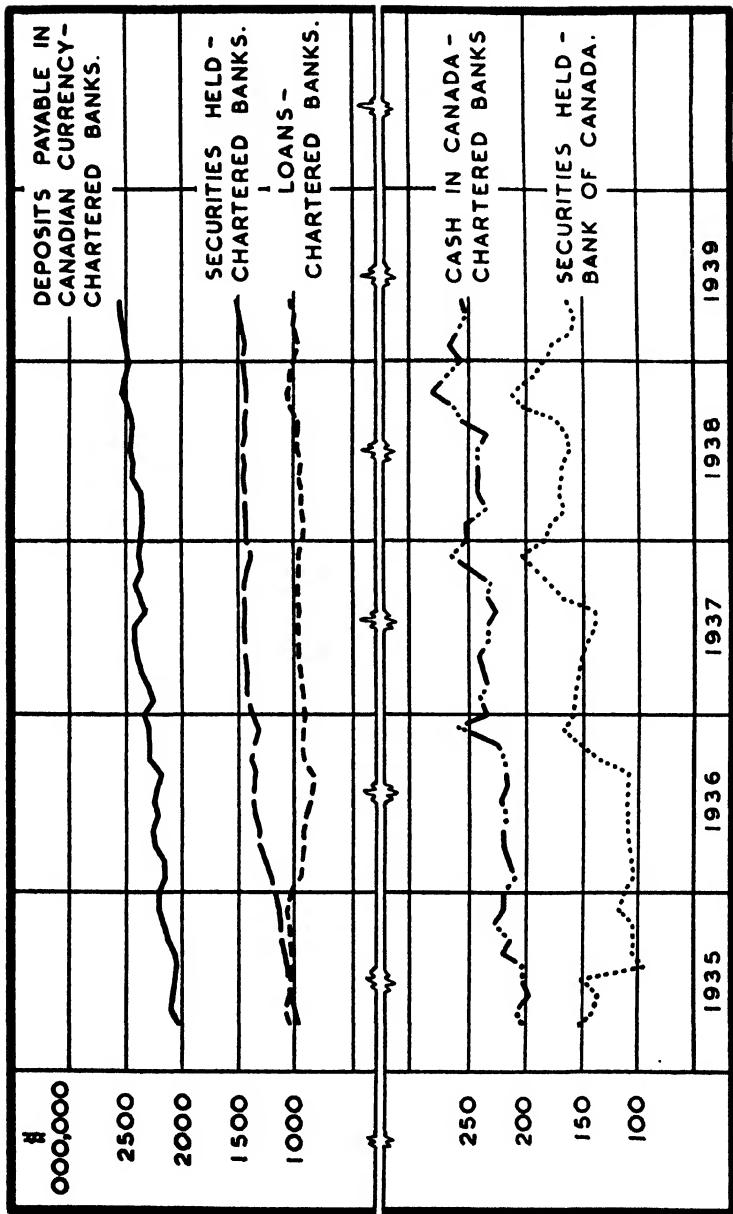
It may be asked upon what principles a central bank, which is usually supposed to be a non-profit-seeking concern, operates in the market. On this point there is no official information, but experience in Canada and elsewhere suggests that in this sphere at least a central bank must do its day to day business as if it were an ordinary commercial organization. On any other basis trading might involve it in substantial losses.

Course of Operations, 1935-9. The net result of the Bank's operations can be seen fairly accurately by reference to its weekly and monthly statements. The general trend since the Bank's establishment is shown in the chart opposite and Table I in the Appendix from which it is compiled. Certain movements deserve attention. There has been a gradual and apparently intermittent pressure towards expansion exerted by the central bank through security purchases. These have mostly come in the autumn when there is a seasonal demand for cash on the part of the banks and the public. But the subsequent withdrawal of cash reserves from the banks has not sufficed to offset the expansion, so that the banks have each winter been left with increased reserves.

The seasonal needs for cash, which the Bank's operations have been supplying, are three-fold. First, there is a fairly strong seasonal demand for notes in circulation amongst the public. Before the arrival of the central bank the chartered banks' note issue used to have a seasonal variation of something like \$20 millions, reaching a peak in November and falling rapidly to a low point at the end of January. Nowadays the Bank of Canada's note issue seems to exhibit a fairly similar movement. Secondly, the banks are legally obliged to withdraw their own notes; and those of the central bank must be increased to replace them. This movement occurs at the end of each year, when banks must retire about \$7.3 millions. From 1941 to 1945 the amount will be twice as much. Thirdly, seven of the ten Canadian banks including the three biggest make up their annual statements in October and November; and all banks like to make a strong showing at such a time with a high proportion of cash reserves and liquid assets against their liabilities. By buying securities in the autumn the central bank can meet the three-fold needs

SECURITY OPERATIONS OF BANK OF CANADA AND RESPONSE OF CHARTERED BANKS

Figures in Table I in the Appendix



of the commercial banks; for specially high cash reserves, for notes to replace those being retired, and for increased public circulation.

During the period under consideration the trend of the security holdings of the Bank has been more steeply upwards than the trend of the chartered banks' reserves. This divergence has been chiefly caused by two factors. One, already mentioned, is the replacement of chartered banks' notes by those of the central bank. Over a three-year period this factor accounts for about \$22 millions of money created by the central bank. The second factor is the general increase in the requirements of the public for notes of all kinds. The period under consideration was one of expanding business and rising prices, and more notes were needed for wage payments and retail trade. In the autumn of 1938 a good harvest had recently contributed to the public's requirements for currency.⁴ Notes in the hands of the public (excluding the commercial banks) rose from a daily average of about \$182 millions in November, 1935, to \$214 millions in November, 1938: an increase of some \$32 millions.⁵ Between the end of November, 1935, and the same date in 1938 the Bank of Canada created credit to the extent of some \$111 millions by adding \$75 millions to its holdings of securities and \$36 millions of foreign exchange. Of this \$111 millions, we have seen that \$22 millions were required to replace chartered bank notes and a further \$32 millions for increased note circulation. The remainder (\$57 millions) was almost all added to the cash reserves of the chartered banks; the actual addition being \$48 millions.

The largest single change in the security holdings of the Bank of Canada occurred as a sporadic operation in July, 1935. At that time there was a drop of more than \$50 millions. The Government revalued the gold held by the Bank and, in connection with the

⁴See the Governor's *Annual Report*, Feb., 1939.

⁵The increase in the Canadian note circulation was a large one. In spite of it, however, the average circulation in 1938 was not quite as great as it had been in 1929. The cyclical trough between the two years was very deep but apart from this cause the change of circulation does not seem peculiar. Canada did not experience the special demands for currency which faced Great Britain in the years following 1932 (the figures of circulation are to be found in the monthly *Statistical Summary of the Bank of England*); nor did it face the very exceptional demands prevailing in the United States (see the *Federal Reserve Bulletin*, Dec., 1938, pp. 1033-5, and also the *Monthly Letter of the National City Bank*, Jan., 1939).

establishment of an exchange fund for future use, the proceeds of the revaluation were largely used to retire government debt held by the Bank. A portion of the proceeds was paid to the commercial banks from which some of the gold had come, and this payment served temporarily to increase their reserves. The extent of the Bank's security purchases undertaken that autumn, so one may guess, was diminished to the extent that the banks' reserves had already been augmented by this event.

Response of the Commercial Banks. The secondary effects of the Bank's operations were chiefly confined to the security market. The trend of bank loans was downwards until the middle of 1936; and therefore, so far from finding any outlet through loans for their increasing reserves, the banks were impelled to purchase securities at a rate even greater than that at which their reserves were mounting. From 1936 onwards their loans showed some recovery; and as these increased the banks diminished their purchases of securities.

It has been suggested that the Bank of Canada's open market purchases have been influenced by a desire to make the commercial banks take up securities "at a pace synchronized with the financial requirements of the governments"; but the figures given in support of this statement are not conclusive.⁶ Friends of the Bank would no doubt prefer it to be said that an orthodox easy-money policy had been followed. In the circumstances of the past few years, however, when government borrowing has far exceeded any other type of financing on the Canadian bond market and when the cessation of government borrowing roughly coincided with a renewed demand for commercial and speculative bank loans, it is impossible

⁶Courtland Elliott, "Bank Cash" (*Canadian Journal of Economics and Political Science*, vol. IV, Aug., 1938, p. 454). The figures he gives are these:

	Increase in Dominion, provincial and municipal debt \$000,000	Increase in banks' holdings of Canadian public securities \$000,000
1935.....	439.4	177.6
1936.....	364.0	285.3
1937.....	53.4	77.5

In the *Statistical Summary of the Bank of Canada* for July, 1939, a chart may be found on p. 107 showing the cumulative growth of government bond issues and of the chartered banks' holdings from 1936 to 1939. The increments were similar in 1936-7 but not thereafter.

to distinguish between the evidence of a general policy of keeping bond yields low in bad times and a particular policy undertaken for the benefit of Governments.

The continued success of open market operations has depended and will continue to depend upon the banks' maintenance of stable cash reserve proportions—that is, upon their regular response to the influences which the central bank exerts upon their reserves. Looking back into the past we find that they have not always kept this proportion constant. Shortly before the War the banks were keeping their proportion around the present level of 10 per cent.⁷ Then, as a war-time precaution, it ran up to more than 15 per cent. In the boom of 1920 it was back slightly below 10 per cent. Ten years later, when the banks were labouring under the exceptional demand for credit which 1929 and its aftermath produced, the proportion was below 8 per cent. By the time the Bank of Canada was established it was back, moving seasonally about the level of 10 per cent again. It is clear, therefore, that the banks do not keep an absolutely rigid proportion over periods of years when general economic conditions are changing. On the other hand, the changes do not seem sufficiently great or sufficiently rapid to threaten seriously the success of central banking operations.

Effects of "Window Dressing." In the past the Canadian banks have practised window dressing: that is, they have made their reserves appear to be larger than was habitually the case by accumulating some extra reserves shortly before each public statement of their positions and divesting themselves of these reserves immediately afterwards. The practice of window dressing, whether for monthly or annual statements, may in some degree impair the control of a central bank; for it will usually mean that the banks' cash proportions are not as steady as they appear to be.

For the purpose of month-end statements the Canadian banks used to improve their cash positions by borrowing temporary re-

⁷These figures are taken from the *Canada Year Book*, 1936, p. 914. Although published in the *Year Book* it is questionable whether these proportions are those to which bankers would pay most attention; chiefly because they exclude from cash reserves the banks' deposits in the Central Gold Reserves which existed from 1913 until the establishment of the Bank of Canada in 1935. But whatever figures were chosen from the banks' returns the reserve proportions would show movements generally similar to those given above.

serves from the Government under the facilities of the Finance Act. The daily average of their borrowings was persistently less than their published month-end figures.⁸ Since the establishment of the Bank of Canada, replacing the Finance Act, this monthly window dressing has ceased. Figures are nowadays collected and published in the Bank's *Statistical Summary* for the average daily reserves of the banks; and month by month these tally quite closely with the month-end figures. This cannot be taken as final evidence that they will never window dress again. The last few years have been ones of unprecedented monetary ease for the banks; never before have cash reserves been so abundant in relation to the demands for credit. If tight conditions return they may be tempted to allow their cash proportions to run down and resort once more to borrowing for the purpose of making a good showing at the end of each month. Nevertheless the fact that the Bank of Canada is nowadays informed of the daily position of each bank makes it less likely that they will revert to their earlier behaviour. The joys and consolations of window dressing are diminished if the results of a daily stock-taking have to be confided to some interested public authority.

In addition to monthly window dressing the banks have been accustomed to adopt the same practice for the purpose of their annual balance sheets. This they still do, and in it they are nowadays aided by the Bank of Canada.⁹ But the extent of their annual window dressing seems to be diminishing. A graph showing by months the banks' cash reserves as a percentage of their total assets has lacked since about 1931 the very pronounced seasonal peaks which it showed in previous years.¹⁰ This, again, is no doubt partly due to the plenteousness of cash reserves in recent years.

⁸*Report of the Royal Commission on Banking and Currency in Canada, 1933* (King's Printer, Ottawa), pp. 41-3. The average borrowing for each month for the period 1927-33 was usually fairly close to the minimum borrowed on any day in that month; whilst the borrowing on the last day of each month was almost always the peak for that month's borrowings. Window dressing is an old British custom. See the *Report of the Committee on Finance and Industry* (London, 1931), pp. 156-60. For more recent information and a statistical estimate of the window dressing of the London Clearing Banks, see a letter by J. F. Cahan in the *Economist* (London), Aug. 6, 1938, p. 278.

⁹The *Annual Report* of the Governor of the Bank, Feb., 1939. See also his evidence to the Banking and Commerce Committee of the House of Commons, 1939, p. 629.

¹⁰See the *Statistical Summary of the Bank of Canada*, Aug., 1938, chart on

Purists may decry the continuance of any window dressing as an attempt (which indeed it is) to make the annual balance sheets or the monthly returns imply something other than the truth; but the annual movements in the Canadian banks' demand for cash may possibly be of some service in allowing the central bank to be more active in the security markets than it otherwise might. Indeed, in their absence the Bank might have been on balance a seller of securities in hardly any month; whereas it has in fact been able to take this position during each of its first four winters. And as an economist in one of the British banks points out, "nowadays the practice probably does little harm, for the central bank has supplementary information as to the true position, and can usually act with due allowance for a bad habit that is hard to kill."¹¹

Recent Stability of the Cash Proportion. The chartered banks have kept their cash proportions surprisingly steady during the lifetime of the central bank. On the average their proportions have only varied between 9.5 and 11.4 per cent, which can be explained entirely in terms of the normal seasonal accumulation of reserves in the autumn. Their behaviour in this regard is the more remarkable because shortly before the Bank of Canada was established their reserves were twice augmented by direct government action; by \$35 millions in 1932¹² and by \$52 millions in 1934. Thus the central bank's urge towards expansion increased a previous pressure. Under this force the Canadian banks have been led to alter very radically the nature of their assets. It was during 1935 that their security holdings first exceeded their loans; but the brief period represented in the foregoing chart does not indicate what a very strange and, to

p. 122. The banks probably chose the autumn as the season to make up their annual accounts partly because it is one in which they can show most active business and in which, also, they used to be able to rely on receiving extra gold reserves from the sales of Canadian agricultural products abroad. During the War, and for the most part after 1928, they were not able to rely upon gold imports to show a favourable cash position. Instead they had to borrow under the facilities of the Finance Act—until the arrival of the Bank of Canada which replaced Providence in the automatic provision of cash at the Thanksgiving season.

¹¹W. F. Crick, "The Role of Statistics in Monetary Affairs" (*Manchester School*, vol. IX, no. 2, 1938, p. 129).

¹²The gross operation was of this amount. The ultimate net effect upon the banks' reserves was considerably less, being a redistribution as much as an increase of the banks' borrowings under the Finance Act.

the bankers, disturbing state of affairs this represented. The background is indicated in an accompanying table.¹⁸

TOTAL SECURITIES AND TOTAL LOANS OF THE CANADIAN CHARTERED BANKS
*Figures relate to the last day in July each year**

	Total securities \$000,000	Total loans in Canada \$000,000	Percentage of securities to loans Per cent
1867.....	6.4	55.4	11.6
1900.....	44.0	303.7	14.5
1914.....	100.7	947.8	10.6
1920.....	365.2	1586	23.0
1925.....	575.5	1067	53.9
1930.....	447	1618	27.6
1935.....	1031	1015	101.5
1936.....	1355	860	157.0
1938.....	1436	991	144.9

*Figures from 1867 to 1929 taken from C. A. Curtis, *Statistical Contributions to Canadian Economic History* (Toronto, 1931).

That the banks should now be sticking to their 10 per cent ratio, despite the extent to which they have had to alter their business to do so, is the most remarkable fact associated with the recent open market operations of the Bank of Canada. The problem of "excess reserves" piling up into unprecedented proportions has never appeared. In this Canada is specially fortunate when compared with the United States, where the growth of excess reserves has hampered central bank control. Of course Canada has not been inundated with an inflow of gold from abroad; and that has been the chief factor contributing to the growth of reserves in the United States. On the other hand, the gradualness of the Bank of Canada's operations has probably been partly accountable for their success. At no one time has the pressure on the Canadian banks been very exceptional, so that they have never been jolted into an alteration of their habits.

It would be a mistake to assume that the Canadian banks will inevitably continue to maintain as stable proportions in the future as in the recent past. They may do so; and the very existence of a trusted central institution, providing rediscounting and lending faci-

¹⁸For a fuller treatment, see J. D. Gibson, "The Changing Character of Bank Assets" (*Canadian Banker*, Jan., 1938, pp. 144-54).

lities, ought to encourage the banks to meet an emergency such as war without greatly strengthening their cash positions. Under normal conditions the banks might consider that the establishment of such an institution would justify reduction of their customary reserve proportions. On the other hand, their increasing scepticism regarding the liquidity of government securities might lead them to build up higher cash proportions. As a further complicating factor the banks might come to regard as "artificial" the changes in their reserves induced by the central bank; and thus they might grow less concerned to alter their loans and investments in response to alterations in their reserves. Such an attitude may have been developed in the United States by the activities of the Federal Reserve Banks and may partly account for the willingness of American bankers to hold excessively large cash proportions.

Influence on Security Prices. What have been the effects upon Canadian security prices? This is a matter which cannot be judged simply by reference to statistical data; and the opinions of those in the bond market are likely to be warped by their attitude to state intervention in general and the Bank of Canada in particular. The effects of the Bank's operations are specially obscure because so many other influences act upon the market, and those from London and New York are transmitted through a medium peculiar to Canada—the movements of bonds payable in two or three financial centres.

Nevertheless it seems possible to say three things which meet with considerable measure of agreement.¹⁴ First, the Canadian market could hardly have absorbed the issues of the Dominion and provincial Governments during the past eight years, at least not without a severe stiffening of rates, had the banking system not been expanding credit. There can be little doubt that the operations of the Bank, coming upon the heels of a large increase of the note issue

¹⁴See opinions expressed by the Governor of the Bank of Canada, *Report of the First Annual General Meeting of the Bank of Canada*, 1936, p. 12; also S. R. Noble, "The Monetary Experience of Canada during the Depression" (in *The Lessons of Monetary Experience*, edited by A. D. Gayer, London, 1937, p. 125); also articles in the *Canadian Journal of Economics and Political Science*, by Courtland Elliott, vol. IV, Aug., 1938, and by J. T. Bryden and W. T. G. Hackett, "Interest Rates in Canada" (vol. III, Aug., 1937, pp. 434-8); also T. Bradshaw, President of the Toronto General Trusts Corporation, speech at the Annual Meeting, Feb., 1939.

by the Government, have succeeded in keeping gilt-edged rates down. Secondly, in the field of Canadian government securities, the support has been restricted to those upon which the market's estimate of risk was not very great. As the depression prolonged, especially in the drought-stricken West, and as the financial position of certain Governments and local authorities continued to deteriorate, the easy money policy which brought relief to some was decreasingly effective in relieving those others which were most needy. Thirdly, the prices of government securities prevailing in London and New York have usually set a ceiling through which security prices in Canada could not break. At times Canadian prices might fall away from that ceiling, owing to a temporary disturbance of confidence or some other cause; and then the Bank of Canada's policy might be one of the forces tending to raise prices—so far and no further. Since the latter part of 1937, however, Canadian prices have risen clearly above the prices of comparable British securities in London.¹⁵ Among the factors contributing to the new situation were the alarming political developments in Europe and the strong position of the Canadian balance of payments which was permitting substantial exports of capital.

Diminishing Effectiveness of Open Market Operations. It seems possible although paradoxical that open market operations in Canada may never again be as effective as in their first application. We have already suggested that Canadian bankers' habits may become less rigid regarding their cash proportions; either because the central bank offers a new source of funds in emergency or because its operations introduce an "artificial" element into the situation. But further, the practical question may be asked: Is it reasonable to suppose that renewed expansive or contractive operations on the scale of 1935-9 are practicable in view of the political and economic circumstances? As for renewed expansion, it would be rash to foretell failure because of the extraordinarily co-operative way in which the Canadian bankers have responded in the past; but the fact that

¹⁵Charts illustrating the spread in yields may be found in the *Monthly Statistical Summary of the Bank of Canada*, Feb., 1939; also in the *Bulletin* of A. E. Ames and Co., Toronto, for April, 1939. The latter points out that, since 1936, the general trend of Canadian government bond prices has been similar to the American, but that Canadian behaviour resembles British much more closely in its reactions to short term influences, especially to shocks to confidence originating in Europe.

the horse has been led to the water and drunk one bucketful makes it less rather than more probable that he will drink another with equal obedience. The Canadian banks are already uncomfortably liquid; that is, if their security holdings can properly be considered liquid assets. And from the point of view of political strategy it is unwise for them to subsist chiefly on the interest from government bonds. As for contraction, there are conceivable circumstances in which the Bank of Canada could sell an appreciable portion of its security holdings without raising too great a hue and cry; but the fact that so much Canadian government debt is now of relatively short term would mean that a hardening of interest rates would quickly be reflected in governmental costs. The political pressure to keep interest rates low has increased, is probably still increasing, and is unlikely to diminish. Moreover, as we showed at the beginning of section (2) of this chapter, low rates cause a narrowing of the market; and this militates against open market operations.

So much for the influence of future open market operations upon the prices and yields of securities: we may now consider their effect upon the credit policies of commercial banks. The fact that the Canadian banks now hold so many securities means that their policies regarding commercial loans are insulated from the influence of the central bank's operations. No contraction of their reserves within the realm of probability would suffice to prohibit an expansion of their loans because they stand so ready to meet a loss of reserves by selling securities or by allowing them to run off at maturity. Conversely, no expansion of reserves would tempt them to lend more liberally when already they have had to seek an outlet for so much of their funds in the purchase of securities.

In short, there are reasons to suppose that the Bank of Canada has already made the best use that can be expected of open market operations. The same may be true of the Bank of England and the Federal Reserve Banks. These operations would serve as a sensitive instrument of control—control over interest rates and over the commercial banks' lending policies—as long as they were not pushed to extremes. It may be that the exigencies arising since 1929 have led to such extreme uses that the delicate edge of the instrument has been temporarily and perhaps permanently impaired. If so it does not follow that open market operations are now useless; only that they are blunted and that for some purposes

(especially to influence the commercial banks' lending policies) they have ceased to be serviceable.

(3) AUSTRALIA

Scope and Method. Open market operations have seldom been undertaken by the Commonwealth Bank of Australia. The first instance was in the last quarter of 1935.¹⁶ Since then there have been other sporadic operations, probably chiefly in regard to the immediate needs of government finance; but information, for reasons to be explained, is sparse.

Of the 1935 operations we have a brief official account.¹⁷ According to it the object of the operations was to check a decline of security prices precipitated by sales from the trading banks; and the operations appear to have been at least partially successful. No account seems to have been taken of the possible secondary effects of the operations: that is, of their effects upon the trading banks' cash reserves and of the resulting stimulus to expand bank credit. The actual purchases were undertaken not by the Commonwealth Bank proper, but by the Commonwealth Savings Bank. This, however, would not alter the influence upon the cash reserves of the trading banks. Like those banks, the Commonwealth Savings Bank keeps its cash reserves largely in the form of balances in the Commonwealth Bank; so that when it purchases securities (in excess of the deposits currently lodged with it by the public) it pays for them by giving up some of its cash reserves. These come into the possession of the trading banks either directly, if they themselves are the sellers of the securities, or indirectly through the current accounts of other sellers. Thus the ordinary effects of open market operations by a central bank may be produced by the activities of the Commonwealth Savings Bank.

To the question, why should the Savings Bank undertake these operations rather than the Commonwealth Bank proper? we have no official reply. It is possible, however, to hazard a guess. The

¹⁶There was a large increase in the security holdings of the Commonwealth Bank at the beginning of 1932; but that was in connection with the absorption of the New South Wales Government Savings Bank.

¹⁷Evidence presented by Alex. F. Bell, Acting Chairman of the Commonwealth Bank of Australia, to the Royal Commission on Monetary and Banking Systems in Australia, July-Aug., 1936, published by the Bank, pp. 3-4.

Savings Bank only issues a semi-annual statement; and thus its security operations may remain hidden for anything up to six months. The General Banking Department publishes a return (albeit an obscure one) every week.

Narrowness of the Security Market. Amongst the reasons advanced for the very limited use which the Australian central bank has made of open market operations the most important is the narrowness of the security market. There are other reasons also: the relative unimportance of cash—cash being merely one component of liquid assets—the variability of the cash reserve proportion, the peculiar heredity and environment of the Commonwealth Bank, and so forth. These will be discussed in turn. It is convenient, however, to start by considering the alleged narrowness of the security market.

There is disagreement whether the Australian market is sufficiently broad to permit the use of open market operations as a continuous and flexible method of control. The Acting Chairman of the Commonwealth Bank has claimed that it is not. He was asked: 'Would matters (in regard to open market operations) be helped if the Bank made it a practice to be constantly on the market buying and selling Government securities?' His prepared reply was: "No. The Bank cannot see that it would gain any advantage, commensurate with the cost involved, from constantly buying and selling securities either from the point of view of its general control of credit or of facilitating its open market operations."¹⁸ The economist of the Bank expected little of such operations because treasury bills had so swollen the liquid (Australian) assets of the banks, because the liquid assets held in London by the banks varied so widely both seasonally and cyclically, and because the local security market was so narrow that attempts to buy or sell securities on a scale anything like sufficient to offset the movements of London funds would cause severe derangement of prices. Such instability of security prices was disturbing to the market; and politically the Bank might find it inexpedient to sell securities when economically it was desirable.¹⁹

At the other extreme in the controversy we find (as usual) the

¹⁸*Ibid.*, p. 4.

¹⁹L. G. Melville, statement to the Royal Commission on Monetary and Banking Systems, May, 1936, published by the Bank, pp. 3, 6, 9.

Bank of New South Wales. Said the general manager: "The market in government securities has been developing very rapidly of late years, and to all appearances is adequate to make central bank action effective. . . . The influence of these operations upon interest rates is very great" And the economist of this Bank said: "I incline to the view that the market is wider than many people suppose. The scope of the market would be increased materially if the Commonwealth Bank entered it as an active participant."²⁰

The Commission to which all this and much other evidence was given reached the following conclusion (if such it may be called): "The width of the market for government securities is difficult to estimate. . . . In our view the market is narrow, but its extent depends upon so many circumstances that no estimate can safely be made of the amount of securities which can safely be sold at any time without seriously affecting their price."²¹ Two of the Commissioners, however, dissatisfied with this statement, added that the narrowness of the market, even if as marked as the Commonwealth Bank suggested, was ground for caution rather than inaction.²²

Under certain circumstances a narrow market might actually be favourable to open market operations. This would be so if the object were to secure a rapid movement of the prices of the securities bought or sold. In this case, the narrower the market the less the volume of operations necessary to secure the desired result. But in fact the object of these operations is seldom merely to cause a rapid movement of particular prices and yields. It may be to secure a *general* movement of security prices, and in a narrow market even a fairly rapid movement in one price may not spread competitively to other prices; or it may be to secure a movement of the cash reserves of the commercial banks, in which case narrowness might impede operations of the required volume.

A diversity of securities, which has probably facilitated the operations of the Bank of Canada, is not to be found in the Austral-

²⁰A. C. Davidson, statement to the Royal Commission on Monetary and Banking Systems, published by the Bank of New South Wales, 1936, p. 74; also T. Hytten, statement to the Royal Commission, published by the Bank of New South Wales, 1936, p. 9.

²¹*Report of the Royal Commission appointed to Inquire into the Monetary and Banking Systems at Present in Operation in Australia, etc.* (Canberra, 1937), pp. 225-6.

²²*Ibid.*, p. 260.

ian market. Diversity of credit status, diversity of nominal or coupon yield, diversity of maturity dates, all these are found amongst the issues of the Dominion of Canada, its provinces, their municipalities, and the many corporations which have issued bonds. In Australia private businesses issue debentures relatively rarely, the debentures of local bodies are seldom priced or traded on the market, there is an appreciable and growing volume of issues by semi-governmental authorities (boards and commissions, etc.), but beyond these all the borrowing of Governments has been unified under the Financial Agreement (1927) and the nominal yields on outstanding issues were brought to a common basis under the Premiers' Plan (1931). The Australian market is not characterized, as is the Canadian, by continuous dealing and switching of investors from one type of security into another slightly different. The fine gradations do not exist. Thus the Australian market is less plastic and less pliable to the influence of a central bank.

In the passage quoted above the Acting Chairman of the Commonwealth Bank objected that open market operations would be costly. No doubt he envisaged that, in the narrow market, security prices would always move against the Bank in whichever direction it was dealing. This danger may be exaggerated. The Australian commercial banks appear to move in and out of the security market without too great fear of loss. In the third quarter of 1932 they held something less than £A 10 millions. These were mostly government securities; the figure excludes treasury bills. Two years later their holdings were more than double that size. The increase continued for another half year until they averaged more than £A 24 millions in the first quarter of 1935. Then they started to decline, and fell below £A 14 millions before the end of 1936. And before the end of 1937 they were again over £A 20 millions. (See Table v in the Appendix.) These movements are not insubstantial; and presumably they are not unprofitable to the banks.

Instability of the Cash Reserve Ratio of the Trading Banks. This instability constitutes another reason why the central bank has not made more use of open market operations. The argument may be put in either of two ways; these, however, really amount to the same thing. It may be pointed out that, because the trading banks allow their cash proportions to vary substantially, any alterations of their cash reserves produced by the central bank's operations are not

likely to induce immediate secondary effects in the credit policies of the banks. Alternatively, it may be said that, in order to produce an alteration in the credit policies of the banks the operations of the central bank upon their reserves must be so much the greater: and—so the argument might continue—the narrowness of the security market makes these extensive operations extremely difficult. But whichever way the statement is put the truth remains that the fluctuating reserve ratio is an obstacle to the success of open market operations.

The Australian banks have permitted considerable alterations in their cash reserve proportions in recent years.²³ From 1925 to 1928 the average quarterly proportion was never less than 18.47 nor more than 21.24 per cent. Then a period of deterioration set in; and in the third quarter of 1930 the proportion ran down to 13.70. It soon revived, however, towards its previous level; and then for the years 1932-5 seemed to hover around 15. Subsequently it fell away; and from 1935 to 1938 it moved between 13 and 10. In addition to these quite rapid alterations from year to year, the figures disclose a certain seasonal movement; the percentage usually being raised by one or two points in the first quarter of each calendar year. These figures will be found in Table II in the Appendix.

It seems reasonable to conclude that the ratio is sufficiently variable to be a real impediment to the success of open market operations. This is not to deny, however, that under certain circumstances such operations may be influential. For instance, at times the cash position of the Australian banks must be a matter of serious concern to them, especially when their reserves are running low and their means of replenishing them are unsatisfactory. At such times open market purchases by the Commonwealth Bank may for a short time be decisive in postponing a credit restriction. Thus, while these operations cannot be used with the same precision as they have been in Canada, they cannot be omitted from any survey of the possibilities of central banking in Australia.

Other Liquid Assets and Other Ratios. One reason why the Australian bankers are satisfied to permit variations in their cash proportion lies in the fact that they regard cash in Australia as only

²³The behaviour of individual banks has varied even more widely than the average. A general discussion of the behaviour of the Australian banks during the period is to be found below in chap. XIII on Treasury Bills, section (2).

one of the components of their liquid assets. They are relatively unconcerned by a fall in cash if it is compensated by a rise in some other liquid assets. Amongst these others the chief are treasury bills and London funds. When the Australian cash proportion fell from its 1925-8 level to its 1932-5 level there was a compensating movement of treasury bills; when it fell again in 1936-7 there was a compensating movement of London funds. It is convenient to postpone an examination of the general changes in the position of the Australian banks (such as we have already given in the case of the Canadian banks) until the chapter on treasury bills.

Australian bankers are inclined to watch the ratio between liquid assets and deposits more closely than the ratio between cash alone and deposits. The former ratio, or its first cousin, often appears in a rather different guise: that is, as the ratio of advances to deposits. This sounds very different but can be seen to be similar if it is realized that advances include almost all assets other than liquid assets. It is natural to expect contemporaneous movements (although opposite in direction) in the two ratios:

$$\frac{\text{liquid assets}}{\text{deposits}} \quad \text{and} \quad \frac{\text{advances (illiquid assets)}}{\text{deposits}}$$

Heredity and Environment of the Commonwealth Bank. It is clear that there are practical reasons—the narrowness of the market, the lack of stable reserve customs among the banks, the importance of liquid assets other than cash—why open market operations could not be expected to exercise the same influence in Australia as they seem to do, for example, in Canada. And yet one cannot help wondering why there has been practically no attempt to use them. The answer probably lies in the special circumstances and personnel of the Commonwealth Bank. Since it undertook the responsibilities of central banking, after 1929, the Bank has apparently not been led by people who were anxious to try new experiments or undertake novel operations. It is conceivable that few amongst the higher officers were aware of the possibilities or consequences of open market control; let alone those farther down the scale who would be entirely engrossed in the problems and routine of commercial banking. The personnel is changing, however, and gaining in experience of central banking. The results of this are becoming increasingly apparent.

Initiative has been further cramped by the peculiar political position of the Bank, and the unwillingness of those in charge to risk prejudicing the institution in the eyes of its many critics. Founded as a competitive commercial concern by a Labour Government, it has never obtained the full respect of Australian bankers and financiers who are not slow to remark and on occasion to criticize indiscretions or failures. On the other hand, it has not retained the sympathy or support of the Labour party who consider that the expansion of its competitive commercial business has been insufficiently aggressive. Its support, therefore, comes nowadays in large measure from the anti-Labour parties—going by different names in different times and places—which were responsible for converting it to its modern role of central banking. As long as these parties are in power the Bank is scarcely in a position to take actions, such as depressing the prices of government securities, which might embarrass the Government. Moreover, a stranger visiting Australia cannot help being impressed by the political glare which surrounds the Commonwealth Bank. As a rule, probably, more is talked about it in the press and in Parliament than about all the other Dominion central banks put together. Anything that the Commonwealth Bank says or does will probably be held against it. The bright lights are not encouraging to an actor who is none too sure of his part nor of the support of his fellows on the stage.

(4) NEW ZEALAND

Operations of the Central Bank. The narrowness of the security market in New Zealand precludes the central bank from using open market operations as a sensitive means of control either over interest rates or over the reserves of the commercial banks. In its early months the Bank's assets consisted of little but foreign exchange and a small amount of gold. The percentage which these reserves bore to its notes and other demand liabilities averaged 99.4 for the first five months; during the next year (1935) it averaged 97.7; during 1936 it averaged 92.0. In the latter year the Labour Government radically altered the constitution of the Bank; and the published returns indicate some change of activities, chiefly in the form of increasing advances to government accounts. (See section (5) of Chapter xi and Table III in the Appendix.) No appreciable use,

however, seems to have been made of the Bank's greatly increased powers to invest in securities.

The Bank's investments have remained modest and sedentary. It is difficult to detect in their movements any definite purpose or policy. In the middle of each year during the winter months they seem to reach a temporary stability, after which they move uncertainly upwards or downwards before finding a new point for hibernation. It is quite clear from the figures that the volume of investments is not altered in such a way as to offset the influence of changes in the government deposits upon the reserve-deposits of the commercial banks. The commercial banks' reserves usually seem to move month by month in the opposite direction to government deposits. There seems some slight tendency for the volume of investments to move at the same time and in the same direction as the note issue; but the movements of the former are usually smaller than the latter even when in harmony with them.

In general it seems reasonable to conclude that open market operations have not yet played an appreciable part in the activities of the Reserve Bank; and that when investments are undertaken they are intended to facilitate government finance rather than to influence interest rates or the credit structure of the country. During 1938-9 the Labour Government is said to have been anxious to issue more treasury bills to the central bank in order to finance various projects; and the Bank, distrustful of the monetary effects of such borrowing, is said to have been advising to the contrary. Upon the outcome of negotiations on such matters will probably depend the immediate future of the Reserve Bank's investments.

Behaviour of the Commercial Banks. From whatever investments the central bank undertakes, whether voluntarily or involuntarily, there can be little or no secondary effects. The trading banks' reserve ratios are not stable; they generally do not try to adjust their credit policies in New Zealand to changes in their local cash reserves. As an accompanying table shows, even during the brief lifetime of the Reserve Bank the trading banks' cash ratios (quarterly averages) have varied between 30 and 13 per cent.

Like the Australian banks, those in New Zealand pay attention to ratios other than the cash/deposit one; especially to the liquid-asset/deposit and to the advance/deposit ratios. This habit effectively precludes from effectiveness another type of open

CASH RATIOS OF THE SIX NEW ZEALAND TRADING BANKS*

Quarter ending	Cash in New Zealand† to total deposits
	Per cent
1934—December.....	29.2
1935—March.....	18.7
June.....	13.9
September.....	13.4
December.....	17.0
1936—March.....	21.9
June.....	18.0
September.....	16.1
December.....	21.3
1937—March.....	23.1
June.....	21.0
September.....	21.0
December.....	19.0
1938—March.....	20.5
June.....	17.3
September.....	17.8
December.....	16.4

*Quarterly averages of Monday figures taken from the *Statistical Summary of the Reserve Bank of New Zealand*, Dec., 1938, p. 109.

†Notes, coin, and deposits at the Reserve Bank.

market operation, if such it may be called: i.e. purchase and sale of foreign exchange by the central bank. In the case of the Bank of Canada, for instance, a purchase of foreign exchange augments the reserves of the banks and may change their credit policies; but the Reserve Bank of New Zealand (like its counterparts in Australia and South Africa) would, by buying London funds from the commercial banks, leave their liquid assets and their ratios unchanged. It would merely receive London funds from them and give in return reserve-deposits with itself. The quality of their liquid assets would be altered, but not the quantity.

Although the inconstant cash ratio of the New Zealand banks may stultify open market operations, it may nevertheless serve two good purposes. In the first place there is in New Zealand as in most countries a seasonal discrepancy between the revenues and expendi-

tures of the Government. When the Government used to keep its accounts with one of the commercial banks, the Bank of New Zealand, a seasonal movement of cash reserves between that bank and the remainder used to occur; but the total reserves of the banks were unaltered and the Bank of New Zealand used to make temporary advances to any bank which was strained by the seasonal movement of fiscal funds. The Reserve Bank, since its establishment, has held the government accounts, and nowadays the seasonal fiscal movements disturb the reserve position of all the commercial banks at once. Luckily, however, their willingness to see their reserve ratios vary means that there is no effect upon internal credit conditions.

In the second place, the unresponsiveness of the commercial bank to changed reserves may diminish the inflationary effects of government borrowing from the Reserve Bank. In the present juncture (in the middle 1939) the Labour Government has been securing increased accommodation from the central bank; and the expenditure of the newly created money has been maintaining the reserves of the commercial banks. Further expenditures might be inflationary; but no secondary inflation need be induced because the New Zealand banks will not necessarily respond by expanding credit on the basis of additional reserves.

The trading banks in New Zealand do not deal heavily or frequently in securities. In recent years their investments have been scarcely half as large as their cash in New Zealand, and have moved much less widely and often. When asked whether he would sell securities in New Zealand to get cash in New Zealand, a banker replied: "I do not know of any case where that has been necessary."²⁴ If the time comes, however, with the development of the local market, when the Reserve Bank can undertake frequent or continuous operations, that is to say if the time comes when there is a fairly broad and steady internal security market, by that time the commercial banks will probably have accustomed themselves to holding marketable securities as secondary reserves and the central bank's open market operations may induce co-operative action in the security market. The conditions which make it possible for one to lead are also those which make it possible and profitable for others to follow.

²⁴New Zealand Monetary Committee, 1934, *Minutes of Evidence* (Wellington, 1934), p. 43.

(5) SOUTH AFRICA

In South Africa, as in New Zealand, the extremely narrow market in government securities has practically precluded the use of open market operations; and there has been little incentive to use them because of the unstable habits of the commercial banks in regard to their local cash reserve ratios. Most of the general statements made regarding the behaviour of the central and commercial banks in New Zealand may be applied to South Africa. Only one or two special points remain to be noted in this section.

In the early days of the South African Reserve Bank open market operations were impracticable because of the Bank's constitutional limitations. Originally it was scarcely allowed to hold any local assets other than bills of exchange which were not available. This situation has been twice amended, in 1930 and in 1933: the first, a direct measure, permitting the Bank to hold more assets in the Union; and the second, indirect in its effect, reducing the proportion of sterling assets which the Bank had to hold against its local sight liabilities.²⁶ These amendments have put open market operations within the realm of possibility; but the South African central bank remains the least free regarding its local business of any in the Dominions.

The inconstancy of the South African commercial banks' cash proportions is shown in a table on p. 256. It is clear that the credit policies of the banks could only be altered by means of very large changes in their reserves. The contrasting modesty of the Reserve Bank's actual investments can be seen by reference to statistics given in Table III in the Appendix.²⁷

It is, perhaps, instructive to indicate how the present Governor of the Reserve Bank, in his first annual address, explained the changes in the volume of deposits in the Bank.²⁷ He pointed out that the commercial banks had reduced their reserve-deposits (using them to purchase foreign exchange) because the public's deposits in

²⁶Details of these amendments may be found above in chap. I, section (3); also of the temporary relaxation of the Reserve Bank's restrictions between 1923 and 1928.

²⁷A general discussion of the behaviour of the South African banking system is to be found in chap. XVIII, section (1).

²⁷*Report of the Twelfth Ordinary General Meeting of the South African Reserve Bank, 1932*, p. 11.

those banks had diminished and less reserve-deposits were legally required. At the same time he remarked, in reference to a bad fiscal year, that the Government's deposit had naturally decreased. His completely passive attitude towards these movements is no doubt entirely justified under South African circumstances; but it is in sharp contrast to a comparable explanation given by the Governor of the Bank of Canada who considered the banks' reserve-deposits almost entirely subject to his control.²⁸

CASH PROPORTION OF EIGHT COMMERCIAL BANKS, IN THE UNION OF SOUTH AFRICA*

End of December	Percentage of cash to deposits
1922.....	14.9
1923.....	15.4
1924.....	15.2
1925.....	16.1
1926.....	16.9
1927.....	14.6
1928.....	14.0
1929.....	14.3
1930.....	12.7
1931.....	12.2
1932.....	12.7
1933.....	36.1
1934.....	29.5
1935.....	35.4
1936.....	27.1
1937.....	21.8

*Calculated from figures given in various issues of the *Official Year Book* for Deposits in the Union (total demand and time liabilities to the public) and for Cash in the Union (gold, coin, notes, and reserve-balances in the Reserve Bank).

(6) CONCLUSION

The difficulty with open market operations in New Zealand and South Africa and to some extent in Australia is not that securities cannot be bought and sold at all but rather that they cannot be bought and sold in quantities sufficient to influence the credit policies of the commercial banks. This is so for two apparently inde-

²⁸*Report of the First Annual General Meeting of the Bank of Canada*, 1936, p. 11: "When a country is not on the gold standard, the central bank can do more than affect the commercial banks' cash reserves; it determines them."

pendent reasons: first, the narrowness of the capital markets obstructs trading and, second, the elasticity of the banks' cash proportions necessitates so much the more trading if its influence upon the banks is to be effective.

Actually these two causes are not independent. There is only one primary cause: the narrowness of the markets. It is because of this narrowness that the banks have had to accustom themselves to wide variations of their reserve proportions. Had they been able to keep their cash reserves steadily down to what they regarded as a safe minimum, had they been able to invest temporary surpluses of cash in the local market with assurance of withdrawing them when required, they would surely have done so. But this is precisely what they have not been able to do. Many of their local loans or investments might be liquid—in the sense of ultimately self-liquidating—in so far as they financed commerce rather than agriculture or manufacture; but the demand for commercial accommodation is even less elastic or responsive than the demand for industrial or agricultural loans, and thus cannot be relied upon to absorb temporary surpluses of bank credit. Moreover, even commercial credit (investments in first class bills, etc.) could not be liquidated (marketed) immediately in the *local* market if all the banks, few in number and similar in interests, were simultaneously under pressure. Thus, with no responsive and reliable local outlet for funds on short term or on call, the banks were forced to permit their local cash proportions to fluctuate with the times and the seasons.

Canada seems at first sight to be an exception to the rule that fairly rigid reserve habits cannot develop in a fairly narrow market; but in fact it is not exceptional. The apparent peculiarity is almost certainly due to special circumstances. The head offices of the Canadian banks are only an over-night railway journey from New York. When, until recently, they used to keep large liquid resources in New York, they could afford to maintain a fairly rigid cash proportion in Canada; *not*, be it noticed, by adjusting their credit policies within Canada to the amount of their cash reserves, but rather by adjusting their cash reserves within Canada to the amount of their deposit liabilities.²⁹

²⁹Cf. J. Viner, *Canada's Balance of International Indebtedness, 1900-1913* (Cambridge, Mass., 1924), p. 177: "The banks could therefore have succeeded

If their cash reserves fell below the satisfactory proportion they could build them up at a cost not exceeding the gold-point spread: about 5/32 of 1 per cent each way from par. Conversely they could divest themselves of excess reserves at a similar cost. Money would only have to be lent out on the call market of New York for quite a short time (depending upon prevailing call rates) to recoup this cost. Thus Canadian experience strengthens rather than weakens the thesis that the development of a stable cash proportion depends upon ready access to a well-developed capital market.

It is notable that the Canadian banks' cash proportions are not only much steadier but are also somewhat lower even than the minimum points touched in the other Dominions. In part this might be explained by the rather different business of the Canadian banks; by the fact, for instance, that these banks hold the greater part of the country's savings deposits against which relatively small reserves seem required. But, more important, the lower average proportion in Canada can be taken as further evidence of the easier access of the Canadian banks to a well-developed capital market—or to other sources of liquidity which we shall discuss shortly.

The situation was far otherwise with the banks of the other Dominions. If they collectively wished to change their local cash positions quickly the best they could do was to ship gold half way around the world by steamer; and this, besides being expensive, took an unconscionable time if the banks were readily pressed for cash. The only assets which they could readily buy and sell amongst themselves were London funds; and the banks individually came to regard these as their prime source of liquidity. The estab-

as they did, in maintaining their cash reserve ratios constantly at the desired level through seasonal fluctuations in demand liabilities and cyclical fluctuations in business conditions, only by deliberately adjusting their cash reserves to their total liabilities, and not vice versa. Otherwise the constancy of the cash reserve ratio in the face of great Canadian borrowings abroad in sharply fluctuating amounts cannot be satisfactorily explained. . . . What enables the Canadian banks to maintain their cash ratios at so uniform a level is their use of a system of 'secondary reserves' held outside Canada, and often referred to as the 'outside reserves,' as distinguished from the 'cash reserves' held in Canada. . . . Of these [outside reserves] call loans in New York are by far the most important." We are not here concerned with the relationship of these customs of the Canadian banks to the processes of capital imports; but a review of the controversy on the matter may be found in J. Viner, *Studies in the Theory of International Trade* (New York, 1937), chap. VII, part IV.

lishment of mints in the Dominions,³⁰ all of which have in their time been important gold producers, meant that cash could be accumulated without recourse to import. But this process, again, took time; nor was it costless, because in accumulating locally produced gold the banks had to forgo the revenues which they otherwise obtained from handling the gold exports.

The Bank of Canada was thus peculiarly favoured in the stable reserve habits of the local commercial banks. This stability was, as we have seen, originally the result of proximity to New York. The Bank was further favoured in that, shortly before its arrival on the scene, circumstances had twice arisen to shake the banks' dependence upon New York: i.e., in the two periods of fluctuating exchanges, 1919-24 and 1931-4. Thus they had been weaned from too great reliance upon foreign liquidity; and they had found in the Finance Act a local source much to their liking.³¹ The Finance Act paved the way for the Bank of Canada by diminishing the banks' dependence upon New York, by increasing their dependence upon Ottawa, and by facilitating their maintenance of stable reserve ratios. Recourse to it was easy, and the cost could be reduced to a minimum by borrowing only for the very brief periods when window-dressing was required.

Relying partly upon this Act, at times upon their foreign resources and at other times upon the local security market, the Canadian banks maintained throughout the greater part of the post-War period the semblance if not the actuality of fairly stable

³⁰Mints were established in the Dominions as follows: In Australia branches of the Royal Mint were established in Sydney in 1855, Melbourne in 1872, and Perth in 1899. The Sydney mint was closed in 1926. In the South African Republic a mint existed from 1890 to 1902. In 1923 a branch of the Royal Mint was opened in Pretoria. In Canada a branch of the Royal Mint was established at Ottawa in 1908 but in 1931 it became a branch of the Department of Finance under the name of the Royal Canadian Mint. During the War much South African gold was refined there for the Bank of England; and after the War the rise of gold mining in Canada maintained refining as one of the chief functions of the mint. In New Zealand no mint has been established. The coins of Great Britain and Australia circulated there until 1933, when arrangements with the Royal Mint provided an issue of coinage distinctive to New Zealand. Further information regarding the mints and coins of the Dominions may be found in their official *Year Books*; also E. H. D. Arndt, *The South African Mints* (Pretoria, 1939).

³¹A description of the workings of the Finance Act is to be found in chap. xi, section (4).

cash habits. So firmly was their customary proportion embedded in the minds of Canadian bankers that it remained unshaken by the fundamental change which was introduced by the country's departure from the gold standard and the replacement of the Finance Act by the central bank. No longer were their cash reserves determined by their own activities; by their movement of gold to or from New York and by their borrowings under the Finance Act. Suddenly the Bank of Canada took full charge of their reserves, as the Governor of the Bank clearly pointed out in his first annual speech. The banks no longer adjust their cash in Canada to the position of their local liabilities: they now obligingly adjust their Canadian business to the cash supplied by the Bank of Canada, central and commercial banks alike making use of the increasingly well-developed facilities of the local capital market.

For while these things had been happening the Canadian bond market had grown apace. Here again, proximity to the United States probably exercised a powerful stimulus; even the two- and three-market bonds, which have of late come in for so much abuse, may have played an important part in tiding the Canadian market over the period when local marketability was questionable. These bonds, which commanded a ready market in New York and London as well as in Montreal and Toronto, provided protection against a freeze-up to the banks and other institutional investors and to the growing number of bond dealers. By the time the central bank arrived the commercial banks had come to regard their holdings of Canadian bonds as reliable secondary reserves; individually the banks could rely on the bond market, and in case of collective need they could rely on the Finance Act. Thus, largely fortuitously, the investment habits as well as the cash ratio habits of the banks had become suited to reinforce the open market operations of a central bank; and the breadth of the security market was more than ample for the central bank's activities.

The interdependent development of the Canadian bond market and of the Canadian banks' reliance upon it was so fortunate, so specially favoured by the proximity of the United States and by the course of Canadian legislation, that one cannot help doubting whether the other central banks can expect similar fortune. Their markets will no doubt develop. As they develop the central banks will find dealing increasingly easy; and the commercial banks, in-

creasingly reliant upon local marketable securities as liquid assets, will tend to limit the seasonal and cyclical swings of their local cash ratios. But these things will probably not happen very quickly. The example of Canada, where the stability of cash ratio was rather older but where the development of the local market and of the banks' dependence upon it was a matter of ten or fifteen years, cannot be regarded as a reliable precedent.

CHAPTER X

LEGAL MINIMUM RESERVES, FIXED AND VARIABLE

(1) FIXED MINIMA

IN many countries banking legislation requires that commercial banks shall keep minimum reserves amounting to a specified proportion of their deposit liabilities; and in many cases these reserves must be kept as deposits in the central bank. In some countries, the outstanding example being the United States, the main purpose of introducing this legislation was to enforce minimum standards of liquidity and safety upon a heterogeneous multitude of commercial banks. There has been widespread discussion, in the United States and elsewhere, whether the imposition of legal minima really does promote liquidity; for it is argued, first, that safe and liquid banks are the product of wise bankers rather than of legal formulae and, second, that legal minima may defeat their own objective in that they do not usually increase the banks' aggregate liquid reserves but only immobilize and sterilize part of the existing ones.¹

Purposes of Minimum Reserve Legislation in the Dominions. To some extent this controversy has spread to those Dominions where legal minima have been proposed; but it has usually been beside the point at issue. In the Dominions the purposes avowed for legal minima have *not* generally included the promotion of liquidity in the banking system. For the most part the position of the commercial banks was so clearly strong and well balanced that nobody proposed the legal imposition of further liquidity. In so far as any danger of illiquidity existed, the remedy lay in the introduction of a central bank, a reliable source of emergency funds, rather than in minimum reserve requirements.

Accordingly we must seek other purposes for the legislation.

¹A. M. Allen writes: "The avowed purpose of cash reserves is liquidity, and, although . . . the legal requirements seldom achieve this end, it is from this point of view that they must first be considered." See A. M. Allen and others, *Commercial Banking Legislation and Control* (London, 1938), p. 14.

There are apparently three, and all of them concern central banking rather than commercial banking.² Minimum reserve requirements have been enforced upon the commercial banks (i) to ensure to the central bank a supply of deposits and thus with adequate resources for its local operations, (ii) to ensure a supply of gold and foreign exchange adequate for its foreign operations, (iii) to ensure that the central bank, using open market operations or other means, should be able to influence and ultimately to restrict the commercial banks' extensions of credit.

The first purpose (i.e., that minimum reserve-deposits should ensure to a central bank resources for its operations in the local capital market) is not quite what it seems. A central bank creates legal tender money and thus there is no financial or economic obstacle to prevent it doing so spontaneously: it can create money for lending and investing and does not have to begin by acquiring deposits or capital or anything else. An obstacle to this unorthodox procedure lies, however, in the constitutions of most central banks; for they are legally required to hold a certain minimum proportion of gold or foreign assets against their notes and other demand liabilities. When commercial banks make deposits with a central bank these are usually brought in the form of gold and foreign exchange; so that the deposits of the commercial banks give to the central bank *not the local funds which are economically or financially required* for local operations *but rather the gold and foreign funds that are legally required* for local operations. Thus purposes (i) and (ii) are essentially only one, both depending upon the transfer of gold and foreign funds.

The third purpose requires special consideration under the cir-

²The British Macmillan Committee, after pointing out that ready access to a central bank and to a well-developed capital market constituted a reason why commercial banks should allow their customary reserve proportions to decline, wrote as follows: "The main reason for expecting the banks to keep reserves above the minimum needed for daily convenience is no longer primarily the safety and solvency of the banks themselves, as it was in former times, but the necessity for providing the Central Institution with adequate resources wherewith to manage the monetary system. . . . Thus the appropriate amount of the reserves of the member banks cannot now be left to their individual self interest . . ." (*Report of the Committee on Finance and Industry*, Cmd. 3897, London, 1931, p. 158). The Committee proceeded to recommend that the reserve ratio should be settled periodically by discussion and agreement between the central and commercial banks (pp. 159-60).

cumstances of the Dominions (other than Canada) where stability of foreign exchange rates is maintained, where the banks rely for liquidity on London funds as well as on local cash, where cash ratios are consequently unstable, and where the local capital market is narrow. The narrowness of the capital market means that it will be difficult for the central bank to produce, by open market operations, contractions or expansions in the cash reserves of the banks. The variability of the cash ratios means that, even if their reserves are changed, the banks will not necessarily adjust their credit policies accordingly. This means that, while legal minima may play some part in facilitating credit control and especially credit restriction, they are unlikely to play as clear and decisive a part as they may under more favourable circumstances.

We may now proceed to examine how far minimum reserve legislation in the Dominions has been responsible for equipping the central banks (*a*) with a requisite supply of gold and foreign exchange, and (*b*) with an instrument of credit regulation.

South Africa. When the Reserve Bank was established the commercial banks were required to keep on deposit with it a minimum amount equal to 13 per cent of their demand liabilities and 3 per cent of their time liabilities. Here, as elsewhere in the Bank's constitution, American influence was evident (and irrelevant), the percentages named being those required of commercial banks in the largest American cities. The South African 13 per cent was, however, reduced to 10 per cent in the depression which followed on the heels of the establishment of the central bank.

The original Act secured an initial transfer of gold to the Reserve Bank. The first annual balance sheet of the Bank, issued at March 31, 1922, showed as its only significant items, bankers' deposits of £SA 7.1 millions and capital of £SA 1.0 millions, which had been distributed between a loan to the Government of £SA 2.2 millions, investments of £SA 0.8 millions and cash (almost entirely gold) amounting to £SA 5.1 millions. In the early days, therefore, the bankers' deposits gave the Reserve Bank its gold supply and its means for undertaking a certain amount of lending and investment business within South Africa.

The legal minima must also have served in some degree as a factor restricting the banks' operations, or at least in making their operations dependent upon the central bank's consent. As pointed

out above, we cannot expect the part played by the minima to be very clear or decisive. Nevertheless, the very fact that the commercial banks were anxious to have the minimum against demand deposits reduced from 13 to 10 per cent in a depression indicates that the legal ratio was not insignificant and that their London funds were low enough for them to be unwilling to reduce them in the process of building up their cash in South Africa. Again, the fact that the South African banks did a certain amount of rediscounting and borrowing at the central bank from 1927 to 1932 indicates that they were faced by a general shortage of liquid assets, to which shortage the minimum reserve requirements may well have been a contributing factor.

Canada. The Canadian reserve regulations are extremely simple; no distinction is made either between the demand and time liabilities of the banks or between deposits in the central bank and notes as alternative forms of cash reserve. The banks are simply required to keep at least 5 per cent of their deposit liabilities in Canada in the form of deposits in the central bank and its notes.

It was, however, other clauses of the Bank of Canada Act which endowed the Bank with its initial supply of gold. The banks were required to hand over to the Bank *all* their gold in Canada. Likewise the Department of Finance was required to hand over all its gold. The note issue, which had largely served as bank reserves, became the note issue of the Bank of Canada. The Canadian banks have continued to hold their accustomed reserves of roughly 10 per cent; but nowadays about four-fifths of their reserves are in the form of deposits with the central bank and the remainder in notes. Their deposits were originally obtained partly by the transfer of their gold and partly by depositing the greater part of their holdings of Dominion (Department of Finance) notes.

It might appear that the Canadian banks were entirely unaffected by the minimum reserve requirements of 5 per cent; for they have continued to hold their customary 10 per cent. Actually, although 10 per cent reflects the reserve habits of the majority and of the several largest banks, it does not reflect the habits of one or two of the smaller ones. These had been accustomed to allow their cash reserve ratios to decline below 5 per cent, claiming that the special nature of their business made this practice quite safe.³ Since

³For example, the Banque Canadienne Nationale held at the end of 1932,

the establishment of the Bank of Canada they have had to maintain larger reserves.

The legal minimum of 5 per cent is not likely to play an important part in giving effect to the operations of the Bank of Canada. As a rule the banks keep their ratios near the customary 10 per cent; and they are not likely to revise this well-established custom sufficiently to allow the 5 per cent minimum to become operative.

New Zealand. Under the constitution of the Reserve Bank the commercial banks were required to keep on deposit with it amounts equal to 3 per cent of their time liabilities and 7 per cent of their demand liabilities (excluding any residuum of their outstanding note issues).

As in Canada, however, the central bank's initial supply of gold and foreign exchange resulted from other provisions. The banks were required to hand over all their gold. In addition they made further deposits by turning over to the Bank specially issued treasury bills, which they had acquired from the Government in return for London funds since the exchange depreciation of 1933.⁴ Their gold was valued at £NZ 3.2 millions and the treasury bills stood at roughly £NZ 23 millions two months before the Reserve Bank started operations. In the first monthly return of the Bank the reserve-deposits of the banks amounted to £NZ 16.5 millions; and these deposits together with a relatively small amount of currency gave them an average cash proportion of 36.3 per cent.

The banks soon set about divesting themselves of some of their excessive reserve-deposits. At the end of the year (1934) their overseas funds had risen by £NZ 7.9 millions while their deposits in the Reserve Bank had fallen from the £NZ 16.5 millions to £NZ 4.5 millions. But even this latter sum was well above legislative requirements; for at the time the minimum calculated under the law was only £NZ 2.7 millions. The banks have generally continued to hold cash in New Zealand well above the minimum requirements.

It seems unlikely that the legal minima will have much effect.⁵

\$4.8 millions of cash and had deposits amounting to \$101 millions. Only about one-fifth of these deposits was payable on demand.

⁴For an account of operations under the Banks Indemnity (Exchange) Act, 1932-3, see the *New Zealand Official Year Book*, 1935, pp. 509-10.

⁵In the monthly *Statistical Summary* recently inaugurated by the Reserve Bank the usual tables relating to the banks' reserves do not refer to the legal

It is possible that, from time to time in periods of financial stringency, the banks' liquid assets (internal and external combined) may seem insufficient; and under these circumstances they may feel compelled to restrict operations or to borrow from the central bank rather than to build local reserve deposits up to the required ratio by selling London funds to the bank. But it does not seem likely that such a situation will arise frequently.

(2) VARIABLE MINIMA: CONTROLLING THE VOLUME OF CREDIT

Original Purposes of Variable Minima. The notion of flexible minimum reserves was introduced, or strictly reintroduced, to economists by Mr. Keynes in his *Treatise on Money*.⁶ He commended the measure as a means to offset "the possible inadequacy of ammunition interfering in exceptional circumstances with the efficacy of open market operations"; he considered that changes should be made by small degrees and with due notice, e.g. thirty days. He suggested that the policies of the banks in regard to commercial loans might be guided towards restriction or expansion⁷ by the appropriate variations of the minima. He mentioned a proposal of the sort made by the Federal Reserve Board in 1917 and quoted an American author, Dr. Chandler, who considered in 1926 the part which such a power might play in sterilizing the effects of excessive movements of gold upon the reserves of commercial banks.

In 1935 the Federal Reserve authorities were given power to vary the reserve requirements of the member banks; not reducing them below the existing minima nor raising them to more than position. Instead they show the banks' "cash" (including reserve deposits *and* central bank notes) and the proportion between cash so defined and aggregate deposits (without distinction between demand and time deposits). In the issue of February, 1939, however, a chart did appear which indicated both the actual and the legal minimum reserves.

The Reserve Bank of South Africa, in its annual balance sheet for 1924, adopted the custom of distinguishing between the required "Bankers' Reserve Accounts" and the excess which it called "Bankers' Current Accounts."

⁶J. M. Keynes, *A Treatise on Money* (London, 1930), vol. II, pp. 260-1 and 77.

⁷It is easy to see how increased legal reserve requirements would compel credit restriction if the banks had been operating close to the pre-existing legal minimum. The relaxation of requirements can only lead to expansion of credit (i) if the pre-existing legal minimum had been above what the banks considered the proper reserve proportion, or (ii) if the banks were always so obliging as to consider the legal minimum the proper ratio.

double. In July, 1936, and January, 1937, they made use of this power: minimum requirements were doubled in three steps. Earlier in 1936 the actual reserves of the commercial banks in the Federal Reserve System were running from \$6 billions to \$7 billions; and the minimum reserves required by legislation stood at scarcely \$3 billions. There were "excess reserves," therefore, running over \$3 billions upon which a vast inflationary credit structure might conceivably have been erected. After the reserve requirements had been doubled this possibility was largely eliminated and, moreover, the Federal Reserve authorities were put in a position to enforce a restriction of credit should it prove necessary by open market sales of some (but now not all!) of their investments of \$2.4 billions in government securities.⁸ The excess reserves had been largely the result of continuous gold imports following the revaluation of 1934; so that the case in which increased minima were applied was the one envisaged by Dr. Chandler. The movements of minimum reserves, both upwards in 1936-7 and subsequently downwards in 1938, were all made after due notice, as Mr. Keynes had suggested, and with consideration for the positions of individual banks in the various areas of the country.

The steps were, however, very large; and the last upward step in 1937 was accompanied by considerable derangement of opinion in the bond markets and elsewhere regarding the future of prices. The authorities, so far from running short of ammunition to sell, actually came into the market as purchasers to support bond prices. Subsequently, when general business conditions were receding rapidly in the spring of 1938, reserve proportions were reduced some way towards their starting point. It is clear that, in the United States, variable minima are not yet a very delicate instrument of control, and that their use is likely to produce psychological repercussions of considerable but unpredictable extent. On the other hand, it is certainly one way for the authorities to regain control of the market in circumstances such as those of 1936 and 1937.

Variable Minima in the Dominions. Such were the purposes entertained by the sponsors of variable minima and such were experiences of the United States in trying to achieve them. In 1936 the

⁸For fuller accounts see the *Reports of the Board of Governors of the Federal Reserve System* for 1936 and 1937. Incidentally, we are speaking of American billions, i.e. thousands of millions.

principle of variable minima was incorporated in the constitution of the Reserve Bank of New Zealand. This means of control was vested in "the Governor of the Bank acting with the authority of the Minister of Finance." In no case might the proportions be set at less than the existing 7 per cent and 3 per cent, but no other limit was imposed upon variations. In Australia there have recently been proposals that the Commonwealth Bank should be endowed with similar powers; and the matter was spoken of at the time when the Bank of Canada Act was being framed. Nothing has come as yet of these proposals; nor has the Reserve Bank of New Zealand exercised its powers. Nevertheless it is important to consider how useful this novel device might be under the circumstances of the Dominions.

It has been suggested that the Dominions are just the places where the innovation would be most valuable. In 1937 the author of the Midland Bank's *Monthly Review* took up the matter of "Cash Reserves as a Factor in Monetary Policy." In regard to variable reserve ratios he said in part: "In many countries the facilities for open market operations by the central bank are relatively restricted; the possibility of selling securities when cash supplies seem excessive is severely limited. In countries like this, if minimum reserve ratios are thought necessary, the clearest case is to be found for flexibility in the minima—a much clearer case than, for example, in the United States, where a broad and active capital and money market is available as a field for central bank operations."⁹

It is possible that those who are most optimistic regarding the use of variable minima in narrow markets have not taken sufficient account of the fundamental nature of these markets and of the normal behaviour of the banks which operate in them. The postulate of such control is that the commercial banks *should* pay atten-

⁹ *Monthly Review of the Midland Bank* (London), May-June, 1937. R. S. Sayers writing on "Central Banking in the Absence of a Short Money Market" (in *Modern Banking*, London, 1938, pp. 295-7) lays great emphasis upon the possible uses of variable minima in regulating credit in the Dominions. While Mr. Sayers has made the effort, all too rare, to envisage the special problems and possibilities of central banking under the circumstances of the Dominions, he has failed to realize how unimportant the cash ratio is and that its unimportance is the result of the narrowness of the markets. This failure greatly diminishes the value of this section of his otherwise useful book. Moreover, he seems unaware how far Canada differs from the other Dominions.

tion to their local cash ratios, and it seems that, in narrow markets, they cannot be expected to do so.¹⁰ The credit policies of the banks are not normally influenced by the position of their local cash reserves; nor will they be normally influenced by changes in the legal minima.

But even if variable minima cannot be expected to serve as a flexible, double-edged weapon in narrow markets, can they not be relied upon, as in the American case, to provide an effective check to credit expansion, actual or anticipated? Ultimately, perhaps, yes; but in the narrow markets there will be a factor mitigating or postponing the restrictive effects of raised minima. This factor, obviously operative in Australia and New Zealand, and probably in South Africa, is the ability of the banks to build up their deposits at the central bank by selling to it some of their liquid assets in London.¹¹ The fact that they have supplies of London funds normally available is, as we have seen, a result of the limited development of the local capital markets. Just as far and as long as they are willing to deplete their London funds, just so long and so far is the effect of increased minima upon their credit policies avoided; for they will simply be giving up one type of liquid asset in exchange for another and their liquid position (or ratio of advances to deposits) will be unaltered.¹²

A more effective device of this sort would be a variable minimum ratio, not between cash and deposits, but between all liquid assets

¹⁰See chap. IX, section (6).

¹¹Reliance upon liquid reserves abroad implies actual and expected stability of the foreign exchange rate. The basic assumption that the traditional stability in the exchanges of the Dominions (other than Canada) will be maintained runs through the remainder of this chapter. But it is not quite clear how the commercial banks in South Africa would behave under the circumstances outlined. Since 1933 they have tried to keep a roughly balanced international position. Whether this would prevent them from selling London funds at a time when their local cash position was under pressure is not sure.

¹²There is a difference here between the effects on the banks of raised (variable) minima and of open market sales used in conjunction with fixed minima. In the latter case the banks cannot restore the original depletion of their aggregate liquid assets; for they would have to dispose of some liquid assets (London funds) in order to bring others (local cash reserves) up to the minimum. Thus their liquidity and their earnings (on London funds) are both diminished by the central bank's open market sales, even though their cash reserves may remain ultimately unaffected.

and deposits. Not that the commercial banks customarily keep steady ratios of liquid assets, as a glance at some of the tables in the Appendix will show. Nevertheless, this is a ratio to which the banks are accustomed to pay considerable attention; and, more important, an increase in the minimum liquid-asset-proportion above the actual could *only* be met by restriction of commercial banks' loans and investments. Its effectiveness could not be postponed by sales of London funds or other measures. In Australia and New Zealand the central banks hold London funds included amongst their legal minimum reserves. If legal minima are required of commercial banks there is much to be said for a similar inclusion in their regard.

The case of Canada is rather different because there the central bank does not stabilize the exchange rate by buying all the foreign exchange that is offered at a certain price and because the commercial banks, operating in an adequately developed local market, have maintained fairly steady reserve habits. Thus, if the legal minimum was raised *beyond the customary proportions* of the various banks, it would not be possible for them to build up their reserves by selling foreign exchange; indeed the insulation of the Canadian banking system is reflected in the fact that the Canadian banks no longer normally hold foreign assets appreciably in excess of foreign liabilities. Once raised beyond the banks' customary ratios, variations in the legal minimum might actually serve as a flexible means of control; the banks always straining to return, whenever reduction of the legal minimum permitted, towards their accustomed ratios. Restrictive open market operations (which also depend for their success upon the persistence in bankers' minds of an accustomed ratio) might at times be supplemented by variations of the legal minima; the occasion might arise when the central bank lacked either ammunition or the fortitude to fire it off. But ordinarily open market operations are preferable. They exert a primary influence upon security prices and interest rates which does not result from changes in the legal minima. Moreover, changes in legal minima probably appear even more "artificial" and disturbing to commercial bankers than open market operations upon their cash reserves. In short, neither in Canada nor in the other Dominions should variable minima be relied upon as a flexible instrument of credit control.

(3) VARIABLE MINIMA: CONTROLLING THE OWNERSHIP OF LONDON FUNDS

Purposes and Limitations. In Australia, New Zealand, and South Africa, where the dependence for liquidity upon a financial centre abroad is considerable, the purpose which variable minima might serve is probably rather different from what is generally supposed.¹³ If the central bank wished, for some reason, to acquire London funds held by the commercial banks, an increase in the minimum cash reserves which they were required to keep in notes or reserve-deposits would be an effective way of securing those funds; for the most likely way for a commercial bank to build up its local reserves quickly would be to sell London funds. These the central bank might buy at its published buying price.

The use of variable minima by a central bank to acquire London funds must be regarded as alternative, not supplementary, to their use in the control or ultimate restriction of credit. As long as the commercial banks are in a position to meet an increase of minimum reserves by sales of London funds the restrictive effect of the increase is likely to be postponed. This may be a serious matter, because it is in boom times that the central bank is most likely to be wishing to apply the brake; and just at that time, because in all the Dominions booms are usually associated with an import of capital and a prosperous export business, the London funds of the commercial banks are likely to be ample.

In two Dominions the central banks are not likely to find themselves short of exchange at a time when the other banks are well supplied. In South Africa this is because the mines have agreed to sell all their gold to the Reserve Bank and in New Zealand because the proceeds of dairy exports go to the Reserve Bank. But in Australia it is otherwise, for most of the proceeds of exports go into the trading banks, while the Commonwealth Bank needs constant supplies of foreign funds to meet government indebtedness and it is only a direct recipient of ample funds when the Governments are borrowing abroad. This they do not always do. Thus when the trading banks are not ready sellers of exchange at current

¹³I am told that, when the subject of variable minima was broached in influential circles in New Zealand, the device was considered as a means of internal credit control; but that by the time it became law its possibilities as a means for acquiring London funds had become appreciated. See also foot-note 11, p. 270.

prices the Commonwealth Bank may be under the necessity of cajoling them into supplying it with London funds or else of coercing them; and they, on the other hand, are anxious to lose neither their independence of action nor more of their London funds than they consider necessary for the immediate needs of Governments.

Controversy in Australia Regarding Minimum Reserves. It may thus be understood why the Australian banks are considerably exercised over recent proposals for the establishment either of fixed or fluctuating minimum reserves to be held at the Commonwealth Bank; and why the whole matter is tied up with the Exchange Mobilisation Agreement under which since 1930 they have been paying each month to the Commonwealth Bank a share of their receipts of exchange. The controversy has developed considerable acrimony; and whatever the ultimate outcome it is sufficiently interesting to justify some record.

The matter was brought to a head by the hearings and report (1937) of the Royal Commission on Monetary and Banking Systems. The Commonwealth Bank requested that the banks should be required to hold a fixed minimum amount of reserves on deposit with it; and also that it should have "the right to call upon the overseas reserves of the Australian banking system." The Bank explicitly disclaimed any desire to have a variable minimum, saying that "although a variable minimum might be effective if it could be used, we feel that there are practical difficulties which might prevent the minimum being altered at the appropriate time."¹⁴

This cryptic statement was amplified by the Bank's economist, Mr. Melville. He pointed out that a variable minimum reserve would affect different banks, accustomed by their circumstances to hold different cash proportions, in different degrees; and since its incidence would be unequal he believed that it was a weapon which the Bank's board would never employ.¹⁵ He was of the opin-

¹⁴Alex. F. Bell, Acting Chairman of the Commonwealth Bank, replies submitted to the Royal Commission on Monetary and Banking Systems, July-Aug., 1936, published by the Bank, p. 1.

¹⁵L. G. Melville, Economist of the Commonwealth Bank, evidence to the Commission on Monetary and Banking Systems, May, 1936, published by the Bank, pp. 9-10. I was apparently unable to persuade Mr. Melville, in subsequent correspondence, that the *fixed* minimum which he was advocating, if it ever became effective, would produce precisely the same uneven effects as the variable minimum which he was rejecting because of its injustice. Incidentally, Mr.

ion that a fixed minimum, applied in conjunction with such open market operations as the Bank could undertake and with appropriate variations in the relation between the rate of interest paid on treasury bills sold in the open market and the rate on fixed deposits of the trading banks,¹⁶ might be an important means of controlling the basis and volume of commercial bank credit.

The commercial banks considered variable minima as just one degree worse than fixed minima and opposed both.¹⁷ Their arguments were summarized as follows:¹⁸

1. If fixed minimum deposits were compulsory, the trading banks would have to protect their position by holding deposits with the Commonwealth Bank over and above the minimum. They would therefore hold more idle cash, advance rates would rise, and in the end the burden would fall on borrowers, and the Commonwealth Bank would have no more control than at present.

2. Since cash reserves vary with seasonal movements, the fixed minimum would be ineffective at some times, and a serious burden to the banks at other times. Moreover, it would be likely to be more onerous for some banks than for others.

The Commissioners were no doubt influenced by these considerations—and others. They clearly regarded the imposition of minimum reserves as a matter requiring good judgment; yet the body of their Report hinted that the Commonwealth Bank had not always proved judicious, and their recommendations were against giving the Bank a free hand in the matter. On the other hand, they were well aware that the trading banks, one in particular, were prone to take independent action to the embarrassment of the Common-

Melville was well aware that the variable minima ought to be chiefly regarded as means of acquiring the London funds of the trading banks; but for this purpose he apparently preferred the method of direct requisition.

¹⁶To those unfamiliar with the Australian system it should be explained that the greater the volume of treasury bills sold to the general public the less would be available to the banks as liquid assets. The extent of the public's purchases of bills, and thus the liquid assets of the banks, would depend upon the relationship of the rate paid on treasury bills to the rate offered by the banks to the public upon fixed deposits of the same maturity as the bills.

¹⁷See evidence of L. J. McConnan, Chief Manager of the National Bank of Australasia, to the Royal Commission on Monetary and Banking Systems. Also the memorandum published by the Trading Banks, May, 1938, *Replies by the Australian Trading Banks to Certain Recommendations of the Royal Commission on Monetary and Banking Systems*, p. 10.

¹⁸*Report of the Royal Commission appointed to Inquire into the Monetary and Banking Systems at Present in Operation in Australia, etc.* (Canberra, 1937), p. 228.

wealth Bank. How, then, could they give a measure of ultimately decisive power to the central bank without making the trading banks generally dependent on it? Their solution is reflected in their recommendation:¹⁹

1. The Commonwealth Parliament should legislate to provide that the Commonwealth Bank Board, with the consent of the Treasurer, may require every trading bank to keep with the Commonwealth Bank a deposit of an amount not less than a percentage, specified in the requisition, of the liability of that bank to its depositors in Australia. (The Chairman and Mr. Pitt dissent.)
2. Each trading bank should be required to keep on deposit the same percentage. The Board should have power at its discretion to vary the percentage from time to time within the limit fixed by the consent of the Treasurer.
3. The authority to requisition should not remain in force for more than six months after the consent of the Treasurer has been given, but the Treasurer should have power to consent to its extension for a further period not exceeding twelve months. In any period of two years, the power should not be exercised for a longer period or periods than eighteen months.

The limited duration of the requisition and the requirement of the Treasurer's assent were the protection given against possible errors of judgment on the part of the Commonwealth Bank; on the other hand, in the last instance the central bank could exercise a restraining influence over the trading banks, first impelling them to divest themselves of London funds and ultimately compelling them to contract credit in Australia.

This neatly balanced recommendation did not gain the support of either faction. It did not satisfy the Commonwealth Bank, which naturally disliked to be sent for permission from the Treasurer before it acted, which wanted a more permanent and regular means of control, and which had specifically rejected variable minima. As for the trading banks, they were horrified by the suggestion that the Treasurer and the board of the Commonwealth Bank should be able in collaboration to impose unlimited reserve requirements on them. They pictured a new Labour Government, with the board under its thumb, indefinitely increasing reserve requirements until the trading banks were gradually forced to contract credit and ultimately go out of business, leaving the field entirely to the General Banking Department of the Commonwealth Bank. An easy means

¹⁹Ibid. For an appraisal of this recommendation see the paper by D. B. Copland, "The Commonwealth Bank—Co-operation or Compulsion?" and subsequent discussion (*Economic Record*, vol. XV, 1939, supplement, pp. 21-39).

of nationalizing banking.²⁰ Thus, with nobody to champion the Commission's recommendation, the war was waged on the simple ground of fixed minimum reserves; and there it is still being waged as this is written (in the middle of 1939). Nor is the heat diminished by the fact that the most powerful trading bank recently allowed its reserve-deposits at the central bank to contract to a microscopic size. The central bank, perhaps in reply, assigned to it a proportion of treasury bills far smaller than could be justified on any scale of comparison with the other banks. The trading bank, however, remained undisturbed, with large supplies of London funds—which, after all, were what the Commonwealth Bank ultimately wanted.

The Australian banks insisted that if they were compelled to hold minimum deposits at the Commonwealth Bank they would be forced into deflationary policies.²¹ Whether this would in fact be the case

²⁰See the memorandum of *Replies by the Australian Trading Banks*, p. 10. Also the circular of the Bank of New South Wales, Aug., 1937, dealing with "The Report of the Royal Commission on Banking," p. 4 and *passim*.

In the United States it has been suggested in several quarters that reserves of 100 per cent should be maintained, against *demand* deposits, in the form of cash or government bonds. This drastic measure found support on account of the deflationary effects of the runs on the banks following 1929; its sponsors have not for the most part favoured nationalization of banking. Their intention has been that demand deposits, which constitute the most important monetary medium of the country, should in this way be kept perfectly liquid. Incidentally the system would provide an additional demand for government bonds; and, in political circles, the desire to augment the demand for bonds by making them a backing for the monetary system is not new in the United States or elsewhere. The chief objection to the proposal seems to lie, however, in the suggested dissociation of the management of demand deposits from other and closely associated activities of commercial banking:—accepting fixed deposits, allowing occasional overdrafts, making loans and advances, attending to collections, supplying foreign exchange, and so forth. Commercial banking, in its many aspects, has grown up as an integral part of the structure of modern production and distribution; it is an institution, not an accident. An attempt to eliminate the joint supply of these associated services, amongst which the provision of chequing facilities occupies a central position, seems more likely to meet with evasion than success. Fortunately, since bank failures have been very few in the post-War years, proposals of this sort have seldom been made in the Dominions. But see the evidence before the Canadian House of Commons Committee on Banking and Commerce, 1939, pp. 90, 197.

²¹The Canadian banks threatened that the imposition of minimum reserve requirements, which would in effect render immobile the part of their reserves affected, would "tend to cramp the commercial and agricultural activities of

would depend upon the size of the minimum first established, upon whether it was at all likely to be raised, and upon whether, if the established or expected minimum was above the cash ratio prevailing in some or all of the banks, the central bank could be relied upon to take immediate steps by open market purchases or other means to relieve their shortage of cash. But the banks did not dwell upon these possibilities. And the time was convenient for them to be able to throw the blame for restrictive policies upon the Government or central bank; for the state of trade and the balances of payments made it probable that they would have to pursue a policy of mild restriction in any case.

(4) SUMMARY

Fixed minimum reserves may supply a central bank, once for all and usually at its inception, with a basis for operations at home and abroad. Three of the Dominion central banks were started in life with deposits from the commercial banks; but in only one case (South Africa) were the minima specified in the legislation essential to its establishment and subsequent operations. In the other two the size of the deposits actually made in the central bank was determined by quite other factors; in New Zealand these deposits depended on the banks' gold holdings which were taken over at the Government's valuation and on an extraordinary issue of treasury bills; in Canada they depended on the requirement that the banks should give up their gold and on their own decision to hold the greater part of their customary 10 per cent reserves in the form of central bank deposits.

As a factor facilitating the control of bank credit by a central bank, fixed legal minima are not likely to exert a clear and decisive

Canada" (*Evidence before the Royal Commission on Banking and Currency in Canada, 1933*, mimeographed, p. 3376). Since the establishment of the central bank together with minimum reserve requirements their concern has actually been, not with a shortage of cash, but with a plethora supplied by the central bank. The Australian banks regarded the possibility of variable minima with foreboding because they did not like to rely upon the Commonwealth Bank supplying them with the requisite cash and because they thought it might be best, under the circumstances, always to hold reserve proportions equal to the highest which could be possibly imposed upon them. Whether they would actually inflict such an extreme policy upon themselves rather than expose themselves to influence by the Commonwealth Bank seems dubious.

effect in the circumstances of the Dominions. It will usually be possible for the commercial banks to build their reserve deposits up to the required ratio by selling London funds to the central bank. In Canada, and wherever banks are independent of foreign centres for liquid investments, legal minima may ultimately serve as a solid fulcrum against which the central bank can lever the commercial banks into a restrictive policy; but in Canada the legal minimum is so far below the customary ratio that it is unlikely to become operative. The customary ratio, while it may not be absolutely solid, is a far better fulcrum for it will serve the leverage of open market operations in an expansive as well as restrictive direction. Customary ratios can only be expected to emerge gradually in Australia, New Zealand, and South Africa as the local capital markets develop.

Variable minima cannot be regarded as sensitive means of credit control alternative to open market operations in a narrow capital market. The narrowness of the market, which stultifies open market operations, will have accustomed the banks to variable cash reserve proportions; and under these circumstances variable minima can only be effective as an ultimate and crude weapon for forcing credit restriction. Further, their effectiveness will be delayed as long as the commercial banks meet increased minima by disposal of their foreign assets to replenish local reserves. Much more effective, as an ultimate check to credit expansion, would be a variable minimum proportion relating deposits to all liquid assets.

Variable reserve minima may be used by central banks to acquire the foreign assets of commercial banks. An increase in the minima may impel the commercial banks to obtain the requisite reserves by selling foreign assets to the central bank. Such a use of variable reserves has been considered in Australia in connection with forthcoming legislation to increase the power of the Commonwealth Bank; but the trading banks, while aware of this possibility, have opposed the measure partly because, inexpertly applied, it might create an indefensible shortage of reserves and partly because it might serve a radical Government in making private commercial banking an unprofitable and ultimately an impossible business.

CHAPTER XI

BANK RATE: CENTRAL BANK LENDING AND REDISCOUNTING

(1) INTRODUCTION

TRADITIONALLY in London, and thus in the lore and literature of central banking, the rate published every week by the central bank, at which it is prepared to discount certain approved bills, has been a factor of great importance. Practically all central banks publish one such rate, and often more than one, the different rates being applicable to different classes of lending, discounting, and rediscounting.¹ As section (3) of the Introduction explained, the importance of Bank rate in London arises not so much from the volume of business transacted upon it and upon the associated rates for accommodation of different sorts at the Bank of England, but rather from the knowledge that the Bank normally has the power to make rates in the money market move in harmony with Bank

¹For the benefit of some readers it may be desirable to explain these terms. The difference between a lending and a discounting operation is that, in the former case, the borrower receives the face value of the transaction from the lender at the beginning of its duration and then, at the end, repays the face value plus interest; in the latter the borrower at the beginning receives the face value *minus* the discount and at the end simply repays the face value. Thus when a bill of exchange or other negotiable instrument is discounted it is purchased from the original borrower at a price somewhat less than the face value. It is rediscounted when some holder other than the original borrower passes it on, before its maturity and still at a discount below its face value, to some other holder. The term discounting is generally used in England to include rediscounting.

For example, if an exporter, desiring "spot cash" for his shipment of goods, sells a bill to his bank for £950, the bill being secured on the goods, having a half-year currency, and having a face value of £1000, the rate of discount is 10 per cent: £50 on £1000 for half a year. If at the end of three months the commercial bank finds itself short of cash it may rediscount the bill, selling it either to another bank or the central bank. If the price of the bill at the second sale is £980 the rate of discount (or strictly rediscount) is 8 per cent: £20 on £1000 for a quarter of a year.

rate and from the resulting respect with which financiers and bankers regard its movements. Over a long period of time they have come to regard its changes as indicative of the shape of things to come. Partly as a result and partly as a cause of this a number of institutions operating in the London money market alter their published rates on certain types of deposits in conformity with Bank rate. In addition, both in London and other parts of the country, the banks' charges on loans and advances to clients often bear a fixed relation to Bank rate; although on such advances and deposits the banks usually stipulate minimum rates. All these factors have contributed to make Bank rate the basis of the structure of short term interest rates in England.

The constitution of each Dominion central bank duly provided for the publication of a rate. So far, however, there is not much evidence that these rates are of much significance, so undeveloped are the capital markets—particularly the sections dealing in short term money—and so brief the period in which central bank credit has been available.

(2) SOUTH AFRICA

The South African Reserve Bank, the oldest of the Dominion central banks, has been the most successful in building up the power attaching to its published rates. As Chapter 1 described, the Governor of the Reserve Bank in its earlier years made every effort to popularize the use of bills as a method of obtaining ordinary bank credit and in other ways sought to create conditions in which a short term market would exist and bank rate would become influential. While by no means entirely successful along these lines the Reserve Bank also undertook to do a certain amount of direct discounting for private clients; and taking one thing with another has managed to make its rates, or at least its willingness or unwillingness to lend as reflected in its rates, at times a matter of significance to the financial community.

The Reserve Bank is accustomed to publish discount rates referring to eligible trade bills and treasury bills. Another rate that is regularly published is that for advances against government stocks. The discount rate for agricultural paper used to be regularly published years ago, but it is nowadays well known that, as in the case

of advances against government securities, it is one-half per cent above the rate for trade bills.²

Regarding the effect of the Reserve Bank's rate upon the rates given and received by other institutions, the Deputy Governor of the Bank has written as follows:

Several of the newer central banks have already succeeded in establishing some form of relationship between their discount rates and the advance rates of the commercial banks. In the case of the South African Reserve Bank, for example, the commercial banks have been found to change their overdraft rates whenever the South African Reserve Bank changes its discount rate, and invariably in the same direction, although not always in the same degree. When it raised its rate from 5 to 6 per cent. on the 13th November, 1931, the banks raised their minimum overdraft rate from 6½ to 7½ per cent. on the 19th November, 1931, and when it reduced its rate from 6 to 5 per cent. on the 7th October, 1932, they reduced their rate to 6½ per cent. on the 10th October, 1932. Again, when the Reserve Bank further reduced its rate to 4 per cent. on the 20th February, 1933, they reduced their rate to 6 per cent. on the 20th March, 1933 (it must be added, however, that on the 13th February, 1933, they had partly anticipated the lowering of the Reserve Bank's discount rate by reducing their overdraft rate to 6½ per cent.), but when the former reduced its rate from 4 to 3½ per cent. on 15th May, 1933, they did not make their further reduction of ½ per cent. till April, 1934. Thus, as in London, the commercial banks in South Africa follow the Bank rate promptly upwards and also downwards, except when it falls below 4 per cent.

With regard to discounts, the commercial banks in South Africa usually adopt the local Bank rate in the discount of bills which are considered to be eligible for discount by the Reserve Bank, while for other bills they charge higher rates varying according to the currency of the bill and the quality of the name or names thereon; and in respect of loans against gilt-edged securities for periods not exceeding three months, for which the Reserve Bank quotes [a rate ½ per cent. above its discount rate, they also adopt that rate as a general rule.³

From time to time the lending and discounting facilities offered by the Reserve Bank have been of considerable assistance to the Government, to individual banks, and to the financial community in general. In its early days the Bank was instrumental in assisting the National Bank of South Africa through a period of great difficulty. Its activities in later years are reflected in Table VII in the

²Another English tradition may be detected in the tendency to consider a purchase of a trade bill preferable to an advance against gilt-edged, government securities.

³M. H. de Kock, *Central Banking* (London, 1939), p. 210.

Appendix, and are discussed at some length in Chapter XVIII, section (1). In the Bank's published figures it is not possible to distinguish accurately between credit extended to the commercial banks and to other clients; but the latter may be regarded as a rough minimum, both in the case of "Domestic Bills" and "Other Loans." Whenever the figures show sharp movements above their minima, the commercial banks are probably involved.

(3) AUSTRALIA

A Royal Commission in Australia reported in 1937 in regard to rediscount rates:

Section 29A of the Act of 1924 which would require the Bank to fix and publish from time to time its rates of discount and rediscount of bills of exchange has not been proclaimed, and a rate has never been published. Nor would publication of the rate be effective, because there is no internal bill market of importance in Australia, and no practice of rediscounting by the Commonwealth Bank. The nearest approach to a rate of rediscount is that on treasury-bills. [A rate will be quoted to any bank which enquires for the use of this facility]. Occasionally small amounts of treasury bills have been rediscounted by the Commonwealth Bank, but neither the rate nor the fact of rediscount has been of any importance.⁴

Direct borrowing operations have been similarly unimportant:

A trading bank may borrow from the Commonwealth Bank when it is temporarily short of cash and does not wish to realize assets. Occasionally some trading banks have obtained advances to finance seasonal or abnormal demands from customers, and to assist in taking up government loans. But, even during the depression, these advances were negligible, and from 1927 to 1936 the quarterly average has never exceeded £2 millions.⁵

As long as the Commonwealth Bank maintains its position as an ordinary, competitive commercial bank it is hardly likely that the other commercial banks will, at all willingly, permit themselves to become directly dependent upon its credit facilities.

(4) CANADA

*The Finance Act, 1914-35.*⁶ In the early days of the Great War the Canadian Government passed an Act the general purpose of

⁴*Report of the Royal Commission appointed to Inquire into the Monetary and Banking Systems at Present in Operation in Australia* (Canberra, 1937), p. 68.

⁵*Ibid.*

⁶See the *Report of the Royal Commission on Banking and Currency in Canada, 1933* (King's Printer, Ottawa); also articles by C. A. Curtis in the *Journal of*

which was to support and strengthen the financial system. In a measure it supplied the central lending (or rediscounting)⁷ facilities usually provided by a central bank. Under some of the provisions of the Finance Act, as it was called, the Government might authorize advances of Dominion notes (legal tender) to the banks; and the Treasury Board, a financial committee of the Cabinet, was made responsible for supervising the advances and fixing the interest rate at not less than 5 per cent. These facilities served in the first instance to strengthen the reserves of the banks which were being threatened by runs, next to permit the banks to build up unusually high reserve proportions as a war-time precaution against panics or other eventualities, and finally to support an expansion of bank credit which contributed to war-time inflation.

The advances obtained by the banks gradually rose with seasonal swings until the peak of post-War inflation was passed.⁸ The all-time high for (end-of-month) Finance Act borrowings came in November, 1920, when the banks were borrowing \$123.7 millions. This was almost exactly one-third of their cash reserves in Canada which then totalled \$369.5 millions. All borrowing in this period was at the 5 per cent rate except that, as an inducement to the banks to discount some treasury bills for the British Government in 1917, special provision was made that borrowings secured upon those bills should cost the banks only 3½ per cent.

With the post-War depression the banks' borrowings sank to a figure of about \$10 millions in the summer of 1923. At that time the Finance Act was reconstituted on a permanent peace-time basis, the chief change relevant to monetary events being that the rate of

Political Economy, vol. XL, June, 1932, in the *Monetary Times* (Toronto), Jan. 24, 1930, and Oct. 16, 1931, and in *Contributions to Canadian Economics*, vol. III, University of Toronto Press, 1931; also an article by S. R. Noble in *The Lessons of Monetary Experience*, edited by A. D. Gayer (New York, 1937); also the volume by Sir Thomas White, *The Story of Canada's War Finance* (Toronto, 1921); also Courtland Elliott, "Bank Cash" (*Canadian Journal of Economics and Political Science*, vol. IV, Aug., 1938, pp. 432-59); also the Evidence of W. C. Clark, Deputy Minister of Finance, to the Royal Commission on Banking and Currency in Canada, 1933 (mimeographed), pp. 121-63.

⁷Some of the writers who have described the working of the Finance Act have carelessly used the term "rediscounting." Actually, direct lending, secured by specified collateral, was the only form of credit for which the Act provided.

⁸The relevant statistics are most easily found in C. A. Curtis, *Statistical Contributions to Canadian Economic History* (Toronto, 1931), vol. I.

interest chargeable was no longer limited by the 5 per cent minimum. As prosperity returned and boom set in once more the borrowings rose with annual undulations to a new peak of \$111.4 millions in November, 1929. This was about two-fifths of the banks' total cash reserves of \$286 millions. After that borrowings were retired to a low point of \$6.5 millions in March, 1931, and the banks' cash reserves decreased accordingly.

In November, 1932, the Canadian Government extended to itself the same courtesy which it had given to the Imperial Government in 1917—that of borrowing from the banks upon two-year treasury bills favoured by a special rate under the Finance Act. The banks were persuaded to take up \$35 millions of these bills yielding them 4 per cent and immediately to borrow the same amount of Dominion notes at 3 per cent from the Government, lodging the self-same bills as security. This clumsy arrangement was an effective way of securing some expansion of the banks' cash reserves without altering existing note legislation; and also of securing a more even distribution of borrowings between the banks. The banks' borrowings stayed at a figure somewhat above \$35 millions until the decease of the Finance Act which coincided with the birth of the Bank of Canada.

The course of the rates charged upon borrowing from 1923 to 1935 indicates that, until the transaction of 1932 just described, alterations were not made with an eye to the state of the banks' cash reserves and the monetary condition of the country; rather they seem to have been made, and this applies specially to the preferential rates sometimes given to borrowings secured by certain government issues of treasury notes, with an eye to facilitating government finance. For instance, despite the booming conditions of September, 1928, the general rate was actually lowered from 5 to $4\frac{1}{2}$ per cent, at which level it persisted until October, 1931. Then it was lowered, but only to be raised again in May, 1932, when Canada was in the very depths of depression.

It is very doubtful whether these changes in the rate had any appreciable influence on the volume of borrowing.⁹ Some of the

⁹This is not to deny that the rate could have been made effective. Borrowings would have been checked if the rate had been raised sufficiently and if a minimum period for loans had been established or extended. In order to exercise any restrictive influence the rate probably should have been appreciably above the rate which the banks were receiving on their call loans in New York.

banks borrowed relatively less than others, partly on the principle that it was bad banking to be dependent upon loans from anybody (other than a depositor or a note-holder) and especially from a Government. Others borrowed more liberally; and it is dubious whether, especially in the case of the two leaders in this practice, they were restrained in their expansive or non-restrictive policies by the fact that they were dependent for making up a presentable cash proportion at the end of each month upon borrowing at one rate of interest or another.¹⁰

That the rate of interest was not employed to regulate Finance Act borrowing is indicated by consideration of the machinery involved. Every year, in May, each bank would arrange with the Treasury Board for a "line of credit" under the Act: that is, for a maximum amount up to which it might borrow, if need arose, without questions being asked or new applications made. The clear implication of this system was that the Treasury Board was not at all concerned with any nice regulation of the volume of borrowing, but allowed the banks to use their discretion in the matter as long as certain maxima were not exceeded. Indeed it seems clear that the Treasury Board considered its duties in regard to the Act to have been discharged if it made sure that the banks were lodging with the Government adequate securities against their borrowings.

Lending by the Bank of Canada. Under its constitution the Bank of Canada is to publish the rates at which it will lend to the chartered banks and at which it will rediscount bills for them. A rate of 2½ per cent was accordingly announced when the Bank opened for business; and it has never been changed until the present (1939). So far the Bank has never held any bills, other than the treasury bills it has purchased voluntarily, and never done any rediscounting. Sporadically it has made a few loans, both to the banks, to the Dominion Government, and in one case to a provincial Government.¹¹ In no case, however, has the loan been very large in relation to the total operations of the Bank, nor has it been out-

¹⁰See the description of window dressing in chap. ix, section (2).

¹¹In the summer of 1936 the Bank advanced \$3 millions to the Province of Saskatchewan. The Province had appealed to the Dominion for assistance, and no doubt this temporary loan was made at the request of the Dominion. No province has yet adopted the Bank of Canada as its banker.

standing for more than a month or so. Thus it can be seen that the Bank's published rates and its lending powers have not yet been factors of importance in the Canadian financial situation.

Experience of borrowing under the Finance Act is not a very good indication of what is likely to happen to borrowing from a central bank. Certain points must be noted. First, the Bank of Canada is now able by means of open market operations to supply the Canadian banks as a group with what it considers the proper volume of cash reserves. There is no reason why the banks should ever again, and especially in depression, depend upon borrowing for a large portion of their cash. In other words a low rate on central bank loans should never be effective unless it is meant to apply to a particular bank in special difficulties in bad times. Secondly, if Canada passes into a new period of widespread prosperity and brisk demand for commercial loans, and if at such a time the central bank wishes to keep the pace of expansion from becoming excessive, it may apply gentle but increasing pressure by means of allowing the more headstrong banks to become increasingly dependent upon it for their cash reserves. At such a time an upward movement of the rate might exercise more influence than in the days of the Finance Act because the banks would now realize that the movement indicated a policy on the part of the authorities. Moreover, borrowing for the maintenance of the 5 per cent legal reserves (in the rather unlikely event that this became necessary) would tend to be more continuous and therefore more costly than past borrowing for window dressing; for the legal minimum is based upon average daily reserves, not simply those on the last day of the month.¹² Thirdly, since the Finance Act régime all the Canadian banks have become overloaded with government securities, and for many years to come any pressure put upon their cash positions will tend to be reflected in sales from their holdings of securities rather than in any alteration of their lending policies. If the central bank is to influence these policies it must be by persuasion. Fourthly, it is an open question whether those banks which exhibited a special dislike to using the Finance Act will, when the time comes, feel a similar disinclination to borrow from a government central bank.

¹²The average *daily* reserves of *all* chartered banks, but not each bank, are now published in the Bank of Canada's monthly *Statistical Summary*.

(5) NEW ZEALAND

Types of Accommodation Supplied by the Reserve Bank. As in South Africa, the Reserve Bank in New Zealand is unable to undertake adequate open market operations, and thus its chief method of extending credit and influencing the reserves of the trading banks lies in the field of lending. During the greater part of the Bank's existence the country has been in a prosperous state, with exports at a high level, the reserves of the banking system in London ample, and financial conditions very easy. Thus there has been very little demand for central bank accommodation. In fact the facilities of the Bank might have remained almost unused if a Labour Government, the first Labour Government ever to be in independent and unhampered control of a British country, had not come into office at the end of 1935.

The Reserve Bank is required by its constitution to publish the "minimum rate at which it is prepared to discount or rediscount bills." Whether this should apply to treasury bills, if any were held by the commercial banks, as well as to commercial bills is not stipulated. So far the matter has been of no practical significance. Nevertheless a rate is announced and occasionally altered.¹⁸ The Bank's figures show from time to time that it has made advances other than to the state, and these are presumably to the banks. Their amount has been negligible.

The Labour Government soon set about using the Reserve Bank. The constitutional changes were described in Chapter III. At first the chief new task of the Bank was handling the account of the Government's Marketing Department. This Department manages most of the exports of New Zealand's dairy products; and the credit and foreign exchange business involved is very important

¹⁸In the *Annual Report* of the Reserve Bank for 1935 it is stated that "The discount rate is not of great significance pending the development of a bill market, but it serves to indicate the Bank's views as to the level at which the general public should be able to obtain financial accommodation against first class bills." The following rates have been published:

August 1, 1934.....	4	per cent
July 29, 1935.....	3½	" "
March 2, 1936.....	2½	" "
June 29, 1936.....	2	" "
November 19, 1938.....	4	" "

because these products constitute nearly one-third of the country's exports. The chart on page 291, which represents the figures given in Table III in the Appendix, shows advances to the Government beginning in the middle of 1936. For two years these advances were almost entirely to the Marketing Department; and they swung seasonally between £NZ 3 and £NZ 8 millions. Then came the deluge; other advances to the state soared.

Deteriorating International Situation and Unorthodox Use of Reserve Bank Credit. In order to explain the tremendous leap taken by the Bank's advances to the Government in the latter part of 1938 and early 1939 it is necessary to sketch the background. Throughout most of its first term of office the Labour Government was favoured by economic circumstances. New Zealand exports found a ready market at good prices in England, and until the end of 1937 there was a large favourable balance of commodity trade. A small amount of long term foreign debt was repaid. London funds declined somewhat in 1936 and 1937, but not in any alarming degree considering the high level at which they stood. Then in 1938 the balance of trade deteriorated rapidly. This was partly because exports declined slightly, costs being higher, prices lower, and pastoral conditions less favourable, but chiefly because imports increased very greatly.

The increased imports resulted from several causes. Partly, no doubt, they represented the continued upsurge of prosperity, based upon the increased prosperity of the export industries in the recent past.¹⁴ But in part, also, they were the result of the Government's policies. The level of incomes and of prices in New Zealand was being supported by a number of measures: guaranteed prices to dairy farmers; low interest rates to encourage investment by private interests, and local governments and boards; special encouragement to the establishment and extension of secondary industries; an extensive measure of social security legislation; and a large volume of public works by the central Government which was somewhat accelerated as a new election approached in October, 1938. In the few months before the election the Government began to use Reserve Bank credits for general purposes; the figure rising from zero in May to more than £NZ 6 millions in

¹⁴We must defer until Part IV a detailed account of business cycles in the Dominions and their inter-relationships with imports, exports, and bank reserves.

October, the month of the elections. The extensive use of central bank credit under such circumstances is extremely unorthodox; and the amount involved was, for such a small country as New Zealand, substantial.

Another factor which, together with the deteriorated balance of trade, diminished the foreign reserves of the banking system was the exodus of capital.¹⁵ An outward movement began immediately Labour was elected towards the end of 1935. The amount involved has been estimated at £NZ 7 to 8 millions in 1936 and £NZ 3 to 4 millions in 1937. Some of the outflow was of money that had been left in New Zealand in the hope, now becoming exceedingly remote, that the local pound would regain parity with sterling; some was of money frightened away by the socialistic Government. By the beginning of 1938 the flow had probably been reduced to a trickle; but shortly before the election in October, and even more sharply afterwards, it developed into panic proportions. To check the loss the trading banks began to scrutinize requests for foreign funds more and more carefully, but this sort of rough and ready rationing is seldom very successful. Most of the funds which were moved out went to Australia for investment; and Australian shares held in New Zealand commanded scarcity prices higher (in terms of New Zealand currency) than they would fetch in Australia. The actual movement of funds was chiefly through London and no doubt a substantial amount of the money stayed in that centre.

The flight of capital in 1938 was due partly to uneasiness regarding the financial policies of the Government; including the unorthodox use of Reserve Bank credit; and partly to the higher interest rates obtainable in Australia. It is as yet too soon (July, 1939) to estimate the amount of capital that left the country; but the following table indicates that it must have been large. The final column shows the volume of foreign credits which must have been used up annually (i) to finance any current deficit on international account for invisible imports and exports of services, including service on capital raised abroad in the past, (ii) in long term redemption of debt—if any—and (iii) in exports of capital, normal or panic stricken. Since (i) and (ii) are fairly steady, the variations

¹⁵I am particularly indebted to Professor T. Hytten of the Bank of New South Wales for up-to-date information on these matters.

of the figures in the final column above their minimum must arise chiefly from (iii).

FIGURES RELATING TO CAPITAL EXPORTS FROM NEW ZEALAND*

£NZ 000,000

Calendar year	Excess of exports over imports A	Decrease of oversea assets of Reserve Bank and trading banks B	Amount used up for invisible imports, debt service, etc., and for capital exports (A+B)
1935	12.35	4.44	16.79
1936	12.24	8.01	20.25
1937	12.61	4.43	17.04
1938	6.94	16.85	23.79

*Compiled from the Reserve Bank's *Statistical Summary*.

Licensing of Imports. In December the Government took direct action to remedy the exchange situation, after the net oversea assets of the banking system had sunk below £NZ 10 millions, that is, to roughly one-quarter the size they had been four years earlier. Exchange controls were enforced and a system of licensing imports was introduced. The Government undertook to ration the available acquisitions of London funds, but even so a certain amount of additional rationing had to be continued by the trading banks.¹⁶ In May, 1939, a "black market" in exchange still existed, and premiums of more than 10 per cent were reported as being paid for foreign exchange.¹⁷ By one means and another, however, the reserves of the central bank (gold and foreign exchange) have been maintained fractionally above the legal minimum ratio of 25 per cent.

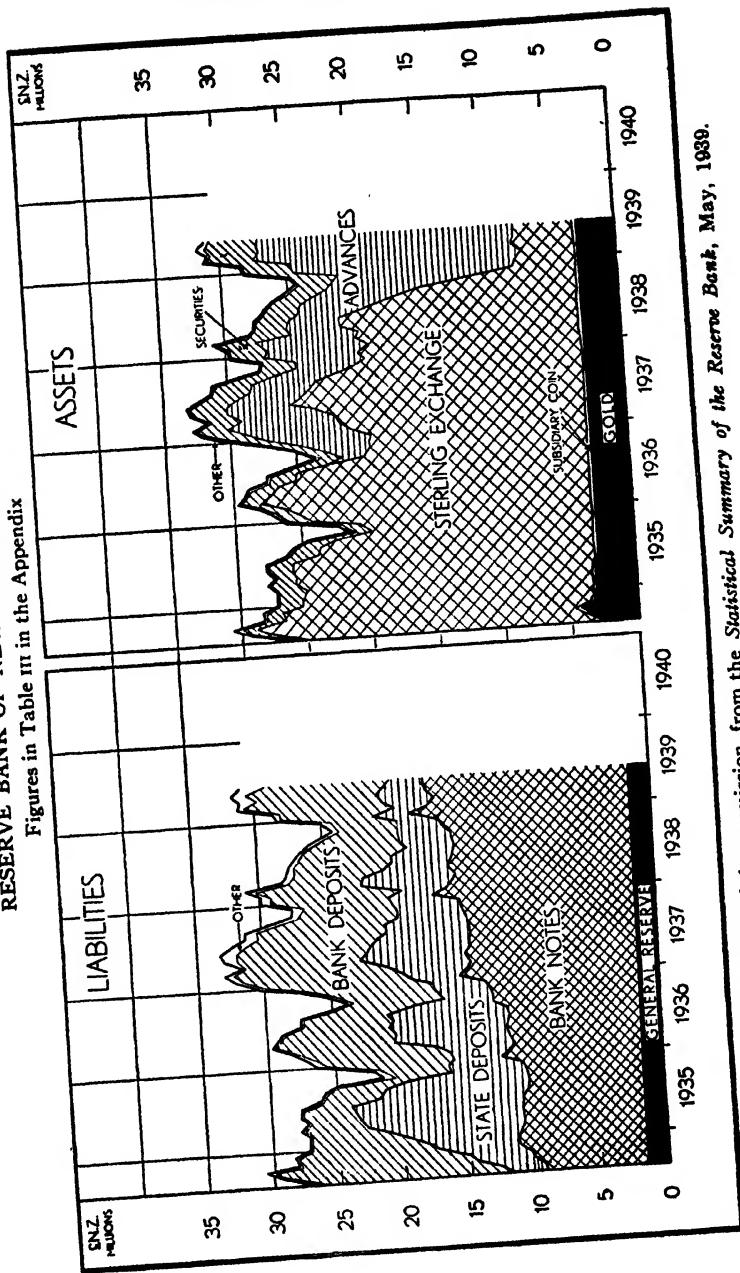
Effect of Expanding Reserve Bank Credit upon the Internal Financial Situation. After the election of October, 1938, the Government continued to expand its borrowings from the Reserve Bank until they reached, at the end of February, the very large sum of £NZ 12.8 millions, at which figure they settled down for a few

¹⁶Statement of the Chairman of the Associated Banks; reported in the *Dominion* (Wellington), May 27, 1939.

¹⁷*Evening Post* (Wellington), May 24, 1939. A note in the *Economist* (London), July 8, 1939, p. 72, describes the "black" market in New Zealand pounds, and points out how small the market is despite the lack of stringency to force dealings into the ordinary banking channels.

CENTRAL BANK LENDING

RESERVE BANK OF NEW ZEALAND, 1934-9
 Figures in Table III in the Appendix



This chart is reproduced, by permission, from the *Statistical Summary of the Reserve Bank*, May, 1939.

months. The primary purpose of borrowing was to meet current and capital expenditures, for it was naturally difficult to raise funds by public subscription under the unsettled circumstances just described and especially so since the Government set its face steadfastly against any rise in interest rates. The Reserve Bank was not a very willing lender, indeed no institution which had inherited accepted central banking traditions could gladly have lent so much at such a time. But whatever the primary purpose of the loans, and whatever the heart-searchings that accompanied them, the extension of Reserve Bank credit was also partially responsible for maintaining the reserve-deposits of the trading banks in the central bank.

These reserves would otherwise have declined as the trading banks purchased London funds from the Reserve Bank in order to supply the excess demands of their customers. And a further factor tending to diminish the banks' reserves lay in the continued expansion of the note issue, reflecting the rising level of wages and the rising value of retail trade which prevailed despite untoward events in the balance of payments. Nevertheless the trading banks' reserve balances were buoyed up, partly by the extension of Reserve Bank credit already referred to, and partly by government expenditures in excess of receipts which transferred increasing amounts of deposits in the Reserve Bank from the government account to the accounts of the banks. The banks, therefore, which lost liquid assets in London between April, 1937, and April, 1939, of £NZ 11.91 millions found that their reserve-deposits in New Zealand, which had declined briefly but considerably in the intervening period, were actually £NZ 0.52 millions higher at the later date.

These movements are shown clearly in the chart on page 291. Considering the violence of the movements of certain of the Reserve Bank's assets, the steadiness of its total assets and liabilities is remarkable; and so is the relative steadiness of the banks' reserve deposits. So sharp and so uncontrollable were the important movements amongst the assets that the residuary steadiness of the total liabilities must in part have been good luck; in part, also, it was no doubt good management.

The course of events in New Zealand has so far (July, 1939) provided an interesting contrast to events in South Africa when

that country suffered a flight of capital in 1931-2.¹⁸ In South Africa an acute credit stringency was permitted to develop and incomes were sharply contracted; thus imports were drastically reduced and the balance of trade improved with a minimum of direct government interference in the exchange market but with widespread hardship. In New Zealand the Government, employing central bank credit, has prevented incomes and local bank reserves from falling; but in consequence has had to introduce a mass of restrictive regulations and licences into the business of importing and dealing in foreign exchange. By May, 1939, it was able to raise an internal loan; which may be an indication of the fact that reasonably easy credit conditions have been maintained within the local capital market. But the opposition which the Government has encountered amongst financial, business, and above all amongst importing groups has increased rather than diminished. It seems clear that import licensing and other bureaucratic devices—which hold little horror for a Government which professes socialism—have come to stay; partly because, in the absence of restrictions of some sort, maintained incomes would mean maintained imports for which the country is unable to acquire the necessary foreign exchange and partly because the desire of business men and financiers to get their money out of the country will remain at least as long as Labour is in power. Whether in the long run the policy of South Africa or of New Zealand is preferable is a matter involving fundamental political issues which are far beyond the scope of this book.

¹⁸For details see chap. XVIII, section (1).

CHAPTER XII

INTEREST CONTRACTS AND PUBLISHED RATES

(1) INTRODUCTION

AT the end of Chapter VIII, section (1), a distinction was drawn between current interest rates, at which contemporary lending and borrowing of all sorts were being undertaken, and interest contracts, the results of lending and borrowing in the past, under which fixed interest payments were being made. Much has now been said, in that chapter and following ones, regarding current rates. Here we are concerned with interest contracts, and more particularly with their adjustments.

Interest Contracts. Since a contract is an obligation which has the force of law behind it, the problem of moving or adjusting contracts is in a large measure legal. Into the legal ramifications we shall not try to enter, although they would be by no means irrelevant. It is important to notice, however, that any general attack upon the existing level of interest contracts is an attack upon the system of private property rights around which so much of the legal framework of modern capitalist society is erected. Indeed the basic principle of sanctity of contract, of keeping one's word, is fundamental to any successful organization of human society short of arbitrary despotism. Thus not only will an attack upon interest contracts arouse the fierce opposition of vested interests and conservatively minded people, but it will also involve or be involved with considerable political disturbance which, if sufficiently acute, may even be revolutionary.

Yet there is another side to interest contracts which we must consider. If the economic causes of waves of hardship and unrest in the Dominions could be summarized in a sentence it would be that these ills arise from the impact of widely fluctuating incomes, derived from the sale of products in foreign markets, upon certain

immobile elements in their economies. Chief amongst these elements is the servicing of debt contracts. Debts can be broadly divided into three categories: public, private, and corporate. About the latter there is little to be said here, partly because for the most part debtors and creditors belong to the same group of society and the problem of debt adjustment creates no social schisms, and partly because (perhaps as a result) the readjustment of corporate debts into line with reduced incomes seems to be fairly well provided for in the fields of bankruptcy legislation and financial reorganization and in accepted business and professional ethics.

The existence of public debts which have to be serviced out of taxes, and of private debts such as mortgages, personal loans, loans to family businesses and farmers, hire purchase (time-payment) agreements, and so forth, puts a very large section of the population in the position of equity-owners: shareholders in a nation-wide concern which has issued senior securities having a prior lien upon earnings. These shareholders—the farmers, the small home-owners and wage earners generally—not only share in, but bear the brunt of, the fluctuating national income. When times go against them, when their incomes fall and their arrears of debt accumulate, their sense of grievance is often accentuated because they have been tempted to "buy in on credit" at or near the top of the market; their farms, their homes, their motor cars, their radios, their washing machines, these and other things have been bought at high prices and now are practically unsalable. Their taxes and debt payments may be in part and indirectly serving to maintain widows and orphans; but they prefer to think of the creditor group as top-hatted money-tyrants. Some read such eminent authorities as Sir Josiah Stamp or Mr. J. M. Keynes on the iniquities of fluctuating price levels and others read Major Douglas on the iniquities of the international bankers; some write pamphlets and others make broadcasts. And so, with a minority agitating and the majority agitated, with a Mr. Lang or a Mr. Aberhart in the ascendant, debt repudiation becomes imminent and debt adjustment inevitable.

When incomes fall drastically, as they did following 1928, the problem is not whether, but how, fixed contracts should be unfixed and readjusted. Much adjustment comes about as a result of

voluntary agreements. The letter of the law, the pound of flesh, is not demanded. Some creditors adopt a generous position because of a genuine consideration for the condition of the debtors and because they believe that in the long run virtue receives a tangible reward; others reach agreements in order to make the best of a bad and a troublesome job. But, whatever the motives of voluntary adjustments, they seldom seem to be sufficient to meet popular demand. In every Dominion many types of debt moratoria have been introduced; and in addition there have been various schemes for the reduction of interest and principal in the most distressed agricultural areas.

These measures were essentially clumsy for they had to deal with a clumsy problem. The general emphasis of legislation, with the possible exception of that introduced by Mr. Aberhart in Alberta and Mr. Lang in New South Wales, has been to secure collaboration and agreement between debtors and creditors regarding the revised terms of the debts; but the whole affair is bound to be honeycombed with injustices and dissatisfactions. This is partly because debtors and creditors occupy different economic and social strata and are therefore likely to hold different codes of ethics;¹ partly because they often live in different regions permitting a different and even hostile economic outlook; partly because different cases are considered by different arbitrators or adjustors with little common experience or common background of cases; and partly because, with the passage of time, the ideas of the adjustors and the financial situations of debtors and creditors are bound to alter. Moreover, the very fact that the real property upon which the debts are secured is unstandardized and peculiarly attached to those who employ it—the farmer and his farm, the workman and his home—means that the assets are fundamentally illiquid and that it is practically impossible to deal with them in a wholesale manner. Further, virtue may be penalized and vice rewarded: the honest man who has succeeded in keeping up his debt payments may come off worse than his neighbour who, less zealous or more slothful, has allowed his debts to pile up. Lastly,

¹To the followers of Mr. Aberhart in his Prophetic Bible Institute there is a world of difference between honest repayment of borrowing (principal) and the payment of usury (interest). This ethical distinction is, however, quite foreign to financiers in Eastern Canada.

creditors and financial intermediaries know that the path of debt adjustment always leads down-hill, and steps once taken cannot be retraced. This increases their unwillingness to make adjustments when times are at their worst and the need is most urgent; for the situation is then deeply coloured by the immediate hardships of the debtors and concessions may be made which, when more normal times return, may seem to have been unnecessarily far-reaching.

This is not to condemn adjustments, but merely to record the difficulties; difficulties which are specially intractable when faced by temporary or *ad hoc* tribunals, and which are aggravated in federally organized countries where the legal jurisdiction of the several governments is not clear or where one authority can afford to take more palliative measures than another.

Published Rates and Their Traditional Immobility. At first sight it may seem strange to consider published interest rates on current borrowing together with interest contracts. Economically, of course, there is little affinity between, on the one hand, the rates currently announced by various financial institutions at which they stand ready to make loans of various types or to receive funds on deposit and, on the other hand, the payments being made under contract on account of past borrowings of all sorts. But politically there is affinity.

The affinity between the two arises from the traditional immobility of published rates. This gives rise to a vested interest in the *status quo* on the part of lender or borrower or both. Departures create trouble and dissatisfaction, and this produces in various quarters desire to let sleeping dogs lie. Moreover, large lending institutions suspect that flexible rates will mean, on the average, lower rates; and this, from the creditors' point of view, they oppose.² Thus the difficulties which confront authorities wishing to procure a movement of published rates are often nearly as great as those preventing an adjustment of interest contracts.

Even in the field of short term rates, when the term of the loans can be measured in days or weeks, there is often great inertia. In the Dominions practically all short term lending is done by the

²In this attitude they are very largely correct. The stable rates are usually set by monopolistic groups: flexibility usually means either competition or government intervention and either will lower the rates.

banks and other large financial institutions (apart from a mass of personal transactions and shopkeepers' credit about which relatively little is known); and such lending is therefore largely subject to published and customer rates. It has been something of a tradition, even a matter of pride, that the leading institutions should keep their rates steady in the face of changing circumstances:

Canada is a young country not yet old enough to have a money market of its own such as operates in London and New York. It has been the aim of the Chartered Banks to maintain rates of interest at a steady level. This policy of the Canadian Banks has had a very steady influence on the business community and borrowers were enabled to make their commitments without fear of their interest costs being subject to violent fluctuations in periods of depression or when wars or rumours of wars convulsed the great money markets of the world. It has been an important factor in creating and maintaining the feeling of confidence in their banks by the public generally.³

This tradition of stability, although still extremely strong, is being gradually broken down by the activities of certain leaders inside the commercial banking community,⁴ and, from outside, by the intermittent pressure of governments and public opinion. The banks in South Africa are becoming accustomed to moving their rates in harmony with the discount rates of the Reserve Bank. In Australia there is less harmony in the adjustment of rates; but movements have occurred with sufficient frequency in the past ten years to suggest that the traditional stability is a lost cause. In New Zealand a number of interest rates are under the control of the central government. These include the rates at which local bodies are permitted to borrow (which the government has unwillingly allowed to rise under pressure of the tightened credit conditions described in the last chapter) and also a number of institutional rates, including those offered by the Post Office and various other depositories. The trading banks could hardly afford, even when they dared, to depart from the official lead. Their lending rates naturally conform to movements in their deposit

³*Evidence presented to the Royal Commission on Banking and Currency in Canada, 1933* (mimeographed), p. 3281. For some arguments against this tradition of stability see C. G. W. Schumann, *Structural Changes and Business Cycles in South Africa* (London, 1938), pp. 282-3.

⁴For example, see the evidence of A. C. Davidson, General Manager of the Bank of New South Wales, before the Royal Commission on Monetary and Banking Systems in Australia in 1936, published by the Bank, pp. 24-5.

rates. It does not seem likely that the Government will wish to change the level of rates very frequently; and institutional rates have not yet (June, 1939) changed in an upward direction. In Canada the opponents of changes clung to their position with greater unanimity and tenacity than elsewhere; and relatively few concessions were made before 1933. Thereafter the downward movement spread over two or three years. A plethora of cash reserves, and a failure of the demand for bank loans to revive substantially after the depression, have since combined with political pressure to keep rates down. It is probably true to say that the level of bank rates is more rigid in Canada than in any other Dominion, less easily changed in conformity with central banking and governmental policy.⁵

(2) SOME EXAMPLES OF DEBT ADJUSTMENTS

*Australia.*⁶ The most famous example of debt adjustment in the Dominions is to be found in Australia. In June, 1931, after two years of falling prices the effects of which were aggravated by a sudden stoppage of lending from London, the Premiers' Plan was adopted by the Commonwealth and the six states. One of the most important provisions of the Plan was for a general reduction of interest payments by something between one-quarter and one-fifth.

In the field of public finance the reduction was chiefly obtained by means of an emergency, patriotic appeal to the creditors in Australia of all governments and government bodies. About 97 per cent of the holders of the securities voluntarily converted to the lower interest rates; and, incidentally, the maturities of the securities of the states and Commonwealth were revised to provide relief for several years and a more orderly programme thereafter. Subsequently all of the recalcitrant 3 per cent were forced to convert, except where hardship was shown to be the result.

It can hardly be doubted that these reductions of the burdens

⁵Although banks like stable rates they prefer them at a high level; and the Canadian banks would undoubtedly like interest rates to rise.

⁶See the volumes of documents edited by E. O. G. Shann and D. B. Copland entitled *The Battle of the Plans* (Sydney, 1931), and *The Australian Price Structure, 1932* (Sydney, 1933); also D. B. Copland, *Australia in the World Crisis, 1929-1933* (Cambridge, 1934); also various articles in the *Economic Record*.

on budgets great and small, together with other provisions of the Premiers' Plan which were devised to give further relief, were chiefly responsible for preventing defaults. As it was, no Australian Government or local body failed to meet its obligations (if we overlook the summary treatment accorded to the 3 per cent). The State of New South Wales, under the radical leadership of Premier J. T. Lang, attempted to default in 1932; but the Commonwealth, supported by other states, found constitutional means of preventing it.

The Premiers' Plan also produced reductions in bank interest rates, although it did not provide for specific movements. The trading banks immediately reduced their rates on new fixed deposits by 1 per cent. Their rates on advances soon followed suit. Savings banks fell into line. Indeed, the Premiers' Plan marked the beginning of a series of reductions of rates on deposits and advances which was not reversed until 1936.

Relief in respect of private mortgages was part of the Plan, but again no specific provisions were included. Various measures were adopted by the states. Four of them, including the two most important, enacted reductions in interest payments to be compulsory unless the mortgagee could show special reasons to the contrary. In the other two states the mortgagor had to take the initiative to secure relief. In general, the reductions involved were equal to, or rather less than, those secured on government debt. They were, however, by no means sufficient to relieve the burdens thrown on debtors by the extension of unemployment and the downward movements of prices and incomes. In all the states special tribunals had to be set up providing, where they saw fit, for stay orders, moratoria, and adjustments of interest and principal.

Political leaders made appeals for voluntary reconsideration and readjustments of other contracts; appeals which probably produced some effects. The losses which financial institutions and other concerns had to write off in the normal course of events were no doubt abnormally large during the depression. In addition, the number and value of cases coming under the Bankruptcy Act were two or three times as great during the slump as they were a few years later.

In its immediate object, the rescue of Governments from

default, the Premiers' Plan was successful. It achieved a limited measure of success, also, in the relief of other debtors; although supplementary measures had to be taken to protect many of them. Its general success is attributable to a number of causes. It was the product of a group of men, economists and civil servants, who had been able to give intelligent and expert attention to the problems involved. It could be popularized amongst the public by the slogan, "equality of sacrifice," for it required reduction of civil service salaries and pensions, as well as creditors' interest, and it was undertaken in conjunction with a general reduction of wages initiated by the Commonwealth Arbitration Court. Further, there were two promises of relief from the strains of the time: first, in the results of the substantial exchange depreciation which had occurred five months earlier and which had been a crucial point in plans previously devised by certain economists, and second, in the new avenue of government financing which the Plan opened up—through the issue of treasury bills. In addition to all these reasons for success, however, one of the important ones must have been the suddenness and the violence with which the economic storm had broken on Australia. In a measure both the proletarian and the rentier classes could be stampeded into the adoption of novel and unpalatable policies.

*New Zealand.*¹ In this country the Government's interference with contracts was probably as great or greater than in Australia, although less publicity outside the country has been given to it. As in Australia the first move was to lower interest rates, current and contractual; and later extensive measures for revising the capital structure of indebtedness were introduced.

Interest contracts, and rent contracts as well, were reduced by legislation in 1932 and 1933. A standard reduction of about one-fifth was the object. In the latter year came the great "conversion" of internally-held government securities. Holders were invited to convert voluntarily to issues with yields lower by about 20 per cent;

¹See J. G. Coates, *A Record of the Internal Debt Conversion, 1933* (Wellington, 1933); also H. Belshaw, *Recovery Measures in New Zealand* (Wellington, 1936), being a Data Paper for the sixth conference of the Institute of Pacific Relations; also H. Belshaw, "Mortgage Adjustment and the Reorganization of Farm Finance in New Zealand" (*Journal of Farm Economics*, vol. XVIII, 1936, p. 568); also articles in the *Economic Record*.

and a tax of 33½ per cent was to be levied on the interest of those who failed to volunteer. A reduction of 20 per cent on the interest payable on the securities of local bodies was enacted; but the intention was that voluntary conversions should take place subsequently at the lowered rate. These would regularize the lowered rates and make them more lasting; for it was intended that both central Government and local bodies should seize the opportunity of rearranging and extending the maturities of their outstanding loans.

While all these arrangements were being introduced the Government announced that reductions were being made in rates published by the trading banks, the several savings banks, stock and station agents, and building societies, and in the investment rate of the Public Trustee's Common Fund.

The depression of the nineteen-thirties probably hit New Zealand less severely than Australia. It will remain doubtful to what extent default on internal debts of Governments and local bodies might have ensued if adjustments had not taken place. It will also remain doubtful whether any scheme of so comprehensive a nature would have been introduced if the successful Australian example had not been so close at hand. Nevertheless a few defaults did occur in New Zealand. Three local bodies defaulted: the Thames Borough Council, the Matakaoa County Council, and the Opunake Harbour Board. In the first case satisfactory terms were reached by the parties concerned, in the second the central Government had to assist in meeting London obligations, in the third the default was merely technical and no loss occurred. As for bankruptcy and compulsory liquidation of private concerns, the available information suggests that relatively little debt structure was affected in these ways.

For the temporary or permanent relief of mortgagors from excessive principal as well as interest burdens, a series of acts was passed beginning in 1931. Neither the acts, nor the activities of the various commissions and courts under them, can be detailed here. It is probable that the measures were more comprehensive and perhaps more effective than in other Dominions, certainly the compactness of the country and the homogeneity of its interests would facilitate adjustments. Creditors complained of a principle of adjustment which was applied fairly widely: that the revenues of a farm or other

enterprise in the several past years should be used as evidence of its earning and thus of its paying power. Because recent years had been chiefly characterized by earnings that seemed abnormally low, the creditors believed the principle unfair to them. Apart from this point of criticism the debt adjustment legislation seems to have worked fairly satisfactorily. By 1938 the country had experienced several years of prosperity, and practically the whole of the business of abnormal debt adjustment had been completed.

As in Australia, reduction of interest and principal of debts was undertaken in conjunction with other measures designed to relieve the burdens of depression and promote recovery. On the whole the measures were similar in the two Dominions: including the reduction of wages and civil service salaries, an increase in domestic financial facilities, and the depreciation of the exchange. (In New Zealand depreciation was more clearly an act of conscious policy than in Australia where, although advocated in various quarters, the movement was ultimately precipitated by an uncontrolled movement in the "black market" and contrary to official policy.) In New Zealand, however, these relief and recovery measures were undertaken in a more piecemeal fashion and thus they never achieved the fame of the Premiers' Plan.

*Canada.*⁸ When compared with efforts in other Dominions to grapple with the problem of debt adjustment those in Canada seem to have been more tardy and less effective. There were a number of factors which delayed and impeded the introduction of ameliorative measures.

In the first place, the personnel of the federal Department of Finance was hardly of a type to give leadership in the matter during the period 1929-32. In the latter part of that period, when the full blast of depression broke and the Canadian dollar depreciated in respect to the American, the type of debt which loomed largest in Ottawa was foreign debt. In so far as financial policy was influenced by considerations of indebtedness it was towards the main-

⁸See W. T. Easterbrook, *Farm Credit in Canada* (Toronto, 1938); also submissions of the provincial Governments and others to the Royal Commission on Dominion-Provincial Relations, 1937-9; also W. A. Mackintosh, *The Economic Problems of the Prairie Provinces* (Toronto, 1935); also G. E. Britnell, *The Wheat Economy* (Toronto, 1939); also various articles in the *Canadian Journal of Economics and Political Science*.

tenance of the Canadian dollar at as high a level as possible in order to lessen the burden of exchange premiums. The concomitants of this policy, which were not fully realized in Government or banking circles, were declining prices and restricted credit. Thus the policy which, at any rate superficially, appeared to facilitate the payment of foreign debts probably intensified the depression and increased the difficulties of the great bulk of debtors whose obligations lay within the country. It was not until the end of 1932 that signs appeared to indicate a reversal of this restrictive policy.

Thereafter direct attacks upon the problems of domestic indebtedness were made by the Dominion Government; but it confronted many difficulties. The Canadian debt structure is very complex. It contains an important section with no counterpart in any other Dominion: the large volume of bonds and debentures issued by corporations. The amount and variety of municipal indebtedness are relatively large because of the greater powers and responsibilities resting in municipalities in Canada. All sections of the bond market exhibit a degree of internationalism unparalleled in any country, arising out of the many issues payable in two or three currencies; and it is this factor which is chiefly responsible for the impossibility of distinguishing clearly between domestic and foreign debt. In addition, in the period under consideration the ability to pay of debtors in the Prairie Provinces was rendered problematic not only by the violent fall of prices but also by the visitation of an unprecedented succession of droughts. How long these doubly adverse conditions would continue was quite unpredictable. Moreover, certainly when compared with Australia and probably when compared with New Zealand, the depression spread through Canada relatively unevenly and slowly. As late as 1930 Canada was able to secure large borrowings abroad; and these supported some sections while others were sinking fast. All these were special obstacles to the achievement of a unified and comprehensive scheme of debt adjustment, such as had been attempted in other Dominions.

But the chief impediment to progress was the distribution of powers between the central Government and the provinces. The former has constitutional jurisdiction over interest rates, banking, and bankruptcy; the latter over property and civil rights including debts. The difficulties and hardships of the depression seemed to foster bickering and back-biting rather than collaboration and co-

operation between central and provincial authorities. In these days it is fashionable to be impatient with federalism, with its wastes, with its inefficiencies, and with its petty jealousies. It should be recalled, however, that in most federations, Canada included, the decentralization of control is based upon divergences of political, religious, social, and economic outlook within the country. It is these divergences, perhaps as much as the constitutional law that partially reflects them, which impair the effectiveness of centralized policy and action. Australia, too, is a federation and might have faced similar difficulties; but there the existence of the Loan Council, whose powers almost certainly turned out to exceed original expectations and intentions, has gone far towards centralizing powers over public finance. Moreover, on almost any count Australia is a far more homogeneous community than Canada.

As we have explained, the central Government's attack upon interest rates and debt was retarded by special factors. It was, therefore, preceded by two or three years in which most sessions of most provincial legislatures passed at least one act to protect debtors. For the most part these acts provided for moratoria on payments; indeed to force adjustments lay beyond the constitutional power of the provincial Governments. There was a general similarity in form, but much diversity in the details and in the application of these laws in various parts of the country. They were much more widely effective on the prairies, where the need was greatest, than elsewhere.

The central Government launched its attack on published rates in 1933, and produced a series of reductions in rates on bank deposits and loans of various sorts. The general rate published for savings deposits and the rates paid by farmers and municipal bodies were first to move. Other rates moved later. A general reduction of rates on policy loans of life insurance companies did not occur until 1935.

These reductions of published rates facilitated and harmonized with the federal Government's policy of forcing market rates of interest downwards by the creation of bank reserves, following the lead of Great Britain and the United States. But it was only the rates payable by first-class borrowers, such as the Dominion and central provinces, that fell. The most needy Governments found that the growing risk of default on their bonds was a factor out-

weighing the Dominion's cheap money policies; and their cost of borrowing rose. Their solvency became increasingly dependent upon the generosity of the central Government.

* In 1935-6 the Dominion Government made an offer intended to assist all the provinces to finance, and the most needy to refinance, at lower rates under a Dominion guarantee. The proposal was to establish a separate Loan Council to control the borrowings of each province. Each Council would consist of the Governor of the Bank of Canada and a representative of the Dominion and another of the province concerned. The Dominion would guarantee the obligations issued by any province which entered the scheme and gave the necessary pledges of revenues. It would even guarantee the outstanding obligations of those provinces whose needs were urgent. After scrutinizing the plan some of the provinces seemed willing to accept it. Others regarded it as an invitation to sell their birth-right of financial independence for a mess of pottage. In particular, the Social Credit Government of Alberta spurned the pottage, and defaulted on its obligations early in 1936. Later it arbitrarily reduced interest payments on government debt by one-half. It also passed a variety of acts designed first to reduce interest and then to reduce principal of private debts; but these were one by one declared unconstitutional by the courts.⁹ Other needy provinces, with poli-

*There is a widespread but erroneous belief that the fundamental principle of the Social Credit party was to introduce Social Credit. In essence it was a movement of protest, a frontier revolt against the financial domination of Eastern Canada. This explains its extensive debt adjustment legislation and anti-bank legislation on the one hand; and, on the other, its coolness towards the advice and the experts supplied by the English Social Credit organization and its willingness to toy with other monetary devices such as the dated stamp scrip of Silvio Gesell. Revolts against absentee financial control have not been uncommon in the history of North America. The fact that this one was chiefly linked to Social Credit doctrines was largely accidental. Forty years earlier it would probably have been linked to the most widely accepted easy-money doctrines of the day, based on free coinage of silver. The similarity between the silver campaign of William Jennings Bryan and the Social Credit campaign of William Aberhart is sufficiently strong to give special interest to the following account of the former:

"For the Democratic voter the issue was only in part that of silver. It is true that he considered it a panacea for many of his ills and that Bryan unduly stressed it, but the wave of frantic emotion which swept over the West and South was of the same sort which had swept them in earlier [frontier] uprisings. Gold was only the symbol of a power which the common man felt to be

tical and financial policies more acceptable to the central authorities, continued to draw financial support from Ottawa; but the Loan Council plan was dropped. The abandonment of this scheme, and the events in Alberta, were followed by a general measure of voluntary adjustment arranged by the Government of Saskatchewan in 1939. A measure of relief was thereby given to hard-pressed individuals and municipal governments.

The depression brought a long list of municipal defaults.¹⁰ These were highest, both absolutely and proportionately, in the central province of Ontario where about 20 per cent of municipal indebtedness was affected. In 1934, 10 per cent of Canadian municipal debt was in default. The municipalities concerned were, for the most part, working-class suburbs of industrial towns and cities where unemployment at once undermined revenues and augmented relief costs. Adjustments of the municipal debt structure to new conditions dragged on for many years; and in 1939 agreements had still to be reached between many groups of debtors and creditors.

Corporate defaults were also widespread; but this situation was cleared up rather more rapidly and satisfactorily. These defaults, like those in the municipal field, were partly the result of economic depression and low prices but also of unrestrained exuberance and

strangling both him and his Americanism, his dream of democracy and of the rights of man against the claims of privilege. To consider that the Southern and Western farmers who had their all invested in that most inconvertible of all forms of property, farm lands and implements, wished to attack the rights of property is absurd. What they were demanding was the right to enjoy and employ *their* property as independent citizens, getting only a square deal from those who had *other* forms of property. Their monetary theory was wrong, but so was that of the [conservatives]. . . . The demand was valid and just, and if the intelligence of the nation could spare only a Bryan to lead them, the reflection was rather on the nation's intelligence than on them" (James Truslow Adams, *The Epic of America*, Boston, 1935, p. 332).

Monetary panaceas, which hold out to people the hope of regularized production and distribution without any sacrifice of their freedom, must be based upon the assumption that people behave in a regular and predictable manner. But novel schemes will only be popular when times are bad and people are in a state of disturbance and unrest. Thus the unsettled conditions which originally contribute to the political success of a panacea will be potent factors working towards its ultimate failure. See V. F. Coe, "Monetary Theory and Politics" (*Essays in Political Economy in Honour of E. J. Urwick*, Toronto, 1938).

¹⁰See T. Bradshaw, *Trends of Municipal Debt*, a paper presented to the Municipal Finance Officers' Association, Toronto, Sept. 11, 1936.

unscrupulous financial methods in the preceding years. In the pulp and paper industry practically the whole of a vast superstructure of debt had to be reorganized; and other industries went through a not dissimilar process.

It was not until 1934 that the Dominion Government passed legislation to facilitate the reduction, interest and principal, of farm indebtedness. Special tribunals were established to encourage agreements between debtors and creditors and to make awards where agreements could not be reached. It was even later that similar facilities were extended to urban debtors.

Difficulties remained chronic however; and the flow of mortgage lending failed to revive. A new and important measure was introduced in 1939. As this is being written the Central Mortgage Bank is not yet fully organized. It is closely linked to the Bank of Canada, having the same Governor and Deputy Governor. Its purpose is three-fold. First, it is to facilitate further debt adjustments. For this purpose the new Bank will accept half the loss suffered by any co-operating institution in reducing the principal of debts due to it. Second, the Bank is designed to encourage the flow of new mortgage money by standing ready to provide funds at a low rate of interest to any co-operating institution. Funds will be provided either in return for securities issued by that institution or in return for "eligible" mortgages—those which have gone through the process of adjustment or which have been issued under terms laid down in the Central Mortgage Bank Act. Third, the Bank is intended to exercise control over the policies, particularly the interest rate policies, of co-operating institutions. Its control, however, is only to be over those institutions which are borrowing from it. In these cases a limit is set on the interest which they may charge their customers. It must not be more than 2 per cent above the contemporary yield on long term bonds of the Dominion. The extent of the Bank's operations will largely depend on the number of institutions that can be persuaded to co-operate. The Dominion cannot exercise compulsion for its jurisdiction does not extend over mortgage lending.

We may conclude that the debt problem was much more difficult to handle in Canada than in other Dominions. For this there were economic, financial, and political reasons. The difficulty, perhaps the impossibility, of organizing a frontal attack upon the problems

of depression in general and of debt in particular has meant that a very large amount of debt had to go by default. This was true of provincial, municipal, corporate, and private debt. And still in 1939 the processes of adjustment drag on, with new machinery being devised to meet old needs.

(3) THE ROLE OF THE CENTRAL BANKS

Breaking Down the Traditional Stability of Published Rates. If, for the reasons given in Chapter VIII and in this one, central banks wish to promote cyclical fluctuations in the interest rate structures of the Dominions, their desires will run counter to the traditional stability of the rates published by financial institutions. In general these institutions may be expected to oppose the new policy. The central bank must then pursue its objective partly by the use of tact and persuasion, partly (if the Government is on the side of the central bank as it usually is) by overt or covert threats of coercive legislation, and partly by the employment of such open market operations as it can rally to its assistance. These latter may exercise some effect. If institutions holding large volumes of marketable securities find the yield on these falling the decline in their revenues exerts a pressure to lower the rates which, in competition with other institutions, they are offering for funds; conversely, a rise in the yield of marketable securities sets up a pressure for competitive increases in published rates amongst the financial institutions. These pressures, however, only develop slowly unless most of the marketable securities involved are short term and thus turn over quickly. This is unlikely to be the case in the Dominions. We can conclude, therefore, that the Dominion central banks, even if they could all employ open market operations freely, would still have to resort chiefly to persuasion and other influence in order to alter the level of published rates.

Problems of Arbitration and Liquidation. "The first duty of a central reserve bank in Australia would be to liquidate stale positions": so said Professor Shann,¹¹ an Australian economist, when in 1930 the wave of falling prices and deflation had just broken

¹¹E. O. G. Shann, Evidence before the Committee of the Australian Senate to consider the Central Reserve Bank Bill, 1930 (Government Printer, Canberra), pp. 29-32.

over the country. The problem of adjusting debts into line with reduced capacities to pay is a difficult and usually a thankless one; but it is one in which the Dominion central banks will become involved from time to time.

The fundamental difficulty in "liquidating stale positions" in the Dominions is that much debt is incurred in connection with the acquisition of natural resources and with the erection of specialized equipment to develop them. This equipment is of all sorts, from farm buildings to hydro-electric power plants. Specialized resources and equipment are essentially immobile and illiquid assets; their values, while derived from the flow of incomes, are derived indirectly and relatively distantly. They are thus subject to speculation in good times and to arbitration in bad times; and for neither speculation nor arbitration is there any firm basis of fact or logic because both must be based upon estimates of the unknown and hazardous future.

The central banks have been and will continue to be called in as arbitrators. It was fitting that the first important duty of the Bank of Canada was to investigate and arbitrate the financial requests made by the debt-ridden Prairie Provinces to their chief creditor, the Dominion Government.¹² Almost the first duties of the Commonwealth Bank, after it assumed the functions of central banking, were in connection with the formulation and execution of the Premiers' Plan. In certain types of arbitration the central banks will find it difficult if not impossible to be unaffected by their paternity, by the fact that they are the children of Government; and in the federally organized Dominions of Australia and Canada, where jealousies exist between the federal and the state or provincial Governments, the central banks will always remain the children of the former. With the best will in the world they must be, in a measure, partisan in the conflict for power and jurisdiction; and if they are not so by inclination they will be forced some way towards it by the pressure of political events beyond their control.¹³

¹²Bank of Canada, *Reports on the Financial Position of the Provinces of Manitoba, Saskatchewan and Alberta, 1937*, published by the Bank.

¹³Thus the Bank of Canada has been the object of attack by the Government of Ontario (not to mention Alberta). Information regarding these attacks, and the Bank's replies, may be found in the *Evidence before the Banking and Commerce Committee of the House of Commons, 1939*, pp. 403-8.

In addition to arbitrating between important debtor and creditor groups the central banks may take other steps to "liquidate stale positions." The most striking instance is the establishment, already referred to, of a Central Mortgage Bank in connection with the Bank of Canada in 1939. There can be no doubt that some unfreezing of the flow of mortgage money in this Dominion was desirable. The period of freeze-up had been long, cold, and comfortless for debtors and creditors alike. But one gains the impression that any device such as a mortgage rediscount bank is prone to be, under the political and economic circumstances of the Dominions, a rather costly ice-breaker; that it will, like any ice-breaker, have to keep on the move in order to prevent the ice re-forming. It is by no means, and its sponsors would not pretend that it was, an adequate substitute for natural spring rains—metaphorically or actually.

For Canada and the other Dominions there is this much of cheer to be said. Their recent problems of debt and interest reduction are not likely to recur in the same degree—except possibly after another period in which the level of interest rates has been maintained by the demands of war and its aftermath. Most of the recent reduction may be regarded as an unusual movement from the extraordinarily high post-War level down to one more normal; and more in harmony with the emergence of the Dominions from their positions as heavy importers of capital into positions of capital self-sufficiency and even capital export.

Some Means of Avoiding the Problems. Finally we may mention some means of preventing in advance the emergence of acute problems of indebtedness. The whole of central banking policy is devoted to the possibilities of maintaining more satisfactory economic conditions in the Dominions; and in so far as this object is achieved debts will be less troublesome. In addition, however, certain specific suggestions have been made for lessening the rigidity of the capital structure within the framework of the capitalist system.

From time to time economists have suggested various new types of securities as means toward this end. Their principle is this: that many would-be lenders are more interested in obtaining an income stable in terms of goods than in terms of money and that, similarly, those who borrow can often better afford to pay amounts fixed in terms of goods rather than in terms of money. Thus people such as widows and pensioners, who are dependent upon investments for the

greater part of their relatively small incomes, require stable real incomes in terms of goods and services—not stable money incomes, the real value of which fluctuates; and, on the other hand, it is much safer for (e.g.) a farmer buying land on credit to enter into some sort of crop-sharing contract with his creditor, rather than a contract for fixed annual money payments. Surely there should be some means of bringing these classes of borrowers and lenders together?

Part of the difficulty is real, and lies in the fact that, money being the accepted medium of exchange and standard of value, many contracts are most conveniently drawn up in terms of it. The great mass of short term indebtedness—including bank deposits, and shopkeepers' credits, and many other forms—is inevitably expressed in terms of money; and institutions with liabilities to meet in terms of money (e.g., deposits) naturally feel compelled to keep their assets (e.g., bank loans to farmers) collectable in the same medium. But, while this is so, part of the difficulty lies also in inertia: the unwillingness of interested parties and financial intermediaries to adopt a novel form of contract. This inertia a central bank might attempt to overcome, although the process would inevitably be gradual.

In Australia the suggestion has been made¹⁴ that the Commonwealth Bank should, every three months, publish the value of a "basic pound" in terms of Australian currency. This value would vary with some index of the cost of living. Contracts might then be drawn up in terms of this "basic pound"; and the notion should not be difficult to popularize in a country where so many wage rates are already regulated in relation to a cost of living index. In addition the Commonwealth Bank might publish the value of an "agricola," this unit varying with the price of agricultural products and being one in which contracts in rural areas might be expressed. Some government securities might be issued payable in "basic pounds" or even in "agricolas," securities which might find favour with certain types of investors and which, so far from involving the Government in any new risk, would be less risky than ordinary government securities bearing fixed interest. For in periods when agricultural prices and costs of living rise the

¹⁴W. B. Reddaway, Evidence before the Royal Commission on Monetary and Banking Systems in Australia, 1937.

Government can usually afford to pay out more; and it is glad to be rid of fixed obligations at times when prices and tax collections are falling.

Another suggestion was made for reducing the rigidity of the debt structure. This was that contracts should be introduced which called for interest payments fluctuating in harmony with current market rates. For instance, the payment each year might be related, by a fixed spread, to the current yield on certain marketable securities or to some other fluctuating rate. It seems that, in the case of some loans by savings banks in Australia, the contract calls for a charge 1½ per cent above the rate paid on savings deposits. This type of contract is specially suitable for such institutions as savings banks which lend on long term but borrow on short term and whose costs of borrowing are therefore subject to much more rapid changes than their revenues from lending. On the other side of the bargain, many borrowers could be found who, while unwilling to borrow on short term, would be glad to find their interest burden reduced in bad times when current interest rates tend to fall, and would be able and willing to pay more in good times when current rates tend to rise.

As a further measure it may be possible to encourage and facilitate financing by issue of shares rather than contracting debt; to spread the acknowledged equity interests wider, and eliminate some of the creditor interests in the national income. This may even be possible in agricultural areas. Crop-sharing agreements are useful in this regard. They may be supplemented and extended by new forms of farm finance in which some central organization supplies individual farmers with capital and expert scientific advice in return for a share in the direction and revenues of their concerns.¹⁵

A central bank which could popularize such devices as these, promoting the extension of equity interests and the use of contracts which lie half way between debts and equities, would diminish its own burdens and those of many other people as well.

¹⁵See Mackintosh, *The Economic Problems of the Prairie Provinces*, p. 278.

CHAPTER XIII

TREASURY BILLS

(1) INTRODUCTION

THE recent introduction or extension of treasury bill finance in the various Dominions has produced several results. These have partly concerned central banking and partly government finance. In regard to government finance, the mere substitution of treasury bills for bank loans to Governments or for government overdrafts makes no appreciable change in the situation of the Governments or of the banks. But if with the treasury bills some new element of competition is introduced amongst the financial institutions the rates on short term government borrowing may be reduced and made more flexible. An example of this type of change, with the advantage going to the Government, may be found in Canada. On the other hand if the introduction of treasury bills reflects insistence by the combined financial institutions upon a more orderly system of short term government finance, the advantage goes, in the short run at least, to the banks and especially to those which, serving independent Governments in a federal country, have found the pressure for government accommodation embarrassing. An example of this type of change may be found in Australia.

Treasury bills may facilitate central banking in three interconnected ways. First, they may become the basis of a short term money market in which accepted central banking operations may work successfully. The development of bill markets is discussed in some detail in section (4) of this chapter. Second, the commercial banks may come to hold local treasury bills instead of liquid assets in capital markets abroad. In the long run any change which diminishes the banks' dependence on foreign liquidity and increases their dependence on the local market should contribute to the influence of the local central bank. Third, the central bank may exercise a persuasive influence over the volume of bills issued by the

treasury and thus over the liquid assets of the commercial banks and their credit policies. It must be noted, however, that the power of the central bank is only increased in this regard if the treasury is more amenable to the central bank's advice than to immediate fiscal needs and if the commercial banks respond in a more or less regular way to alterations in their holdings of treasury bills.

The response of the credit policies of commercial banks to changes in the volume of treasury bills made available to them is not always predictable or even in the same direction; it is usually less regular than the response to alterations in their cash reserves. Take, for example, the behaviour of banks in Great Britain. Under some circumstances they would require more treasury bills before expanding their loans: that is, when their cash proportion was ample but when their proportion of liquid assets (including cash, treasury bills, etc.) was falling below the figure regarded as safe.¹ Under other circumstances they would wish to divest themselves of treasury bills before expanding their loans: that is, when their liquid assets were ample but when their cash proportion was as low as they were willing to allow it to go. In Canada the attitudes of bankers towards cash reserves and other liquid assets are probably similar to those of England, where a clear and important distinction is drawn between the two. In the other three Dominions, and especially in Australia, the line is by no means so clear; and thus the response of the commercial banks to changes in their treasury bill holdings is likely to be more similar to their response to changes in local cash reserves or in London funds. In these three Dominions the central banks find difficulty in using open market operations to vary the liquid assets of the commercial banks; and their advisory influence over treasury bill issues may be used as a supplementary although not entirely reliable instrument.

Up to the present (1939) treasury bills have been more important in replacing the commercial banks' liquid assets abroad than in

¹For descriptions of the influence of treasury bills upon the policies of British banks see "Movements of the Floating Debt" (*Monthly Review of the Midland Bank*, July-Aug., 1937); also W. F. Crick, "The Role of Statistics in Monetary Affairs" (*The Manchester School*, vol. IX, no. 2, 1938, pp. 123-39); also "Banking and Government Finance" (*The Economist*, London, April 24, 1937); and also *The Economist*, Feb. 25, 1939, p. 399.

developing the local short term capital markets. In sections (2) and (3) we shall examine the introduction of treasury bills in connection with the decline in foreign assets in Australia and Canada. The replacement of foreign assets is most clearly exhibited in Australia, and much publicity has attended the change. In Canada something of the same sort may have been going on, but the role of treasury bills has been obscured by more spectacular changes amongst other assets of the banks.

(2) AUSTRALIA²

Introduction of Treasury Bill Finance. In October, 1929, the Commonwealth Government issued treasury bills which were renewed instead of redeemed. In the past there had been occasional issues, but they had been redeemed at maturity. Thus the end of 1929 marked the beginning of a permanent issue of bills. At that time the amount outstanding was only £A 2.5 millions, but it climbed to £A 50 millions in three years about which level it has subsequently fluctuated. Quarterly figures are given in Table IV in the Appendix.

The expansion of the issue was the result of severe stringency in Australian finance, public and private. In 1929 prices of staple exports were falling and a steady inflow of foreign capital suddenly ceased; two factors which reduced the national income and the tax payments of the country and, through an adverse movement in the balance of international payments, severely depleted the liquid assets of the banking system. Not only did the banks lose London funds, but their gold, valued at £A 12 millions, was taken away and shipped to London to meet pressing governmental liabilities. The Governments, unable to continue borrowing abroad and faced by mounting current deficits at home, turned to the banks. These institutions were not in a very strong position. As Table V in the

²Regarding Australian treasury bills the following select bibliography is suggested: *Report of the Royal Commission appointed to Inquire into the Monetary and Banking Systems at Present in Operation in Australia* (Canberra, 1937); also the evidence submitted to this Commission by the representatives of the Commonwealth Bank and the Bank of New South Wales, including Professors Melville and Hytten; also the collection of documents edited by D. B. Copland and C. V. Janes, *Cross Currents of Australian Finance* (Sydney, 1936); also an earlier collection by E. O. G. Shann and D. B. Copland, *The Australian Price Structure, 1932* (Sydney, 1933); also W. R. Maclaurin, *Economic Planning in Australia, 1929-1936* (London, 1937), chap. ix.

Appendix indicates, their advances were still increasing until the end of 1929—the usual lag of advances behind a change in business conditions—and their liquid assets were rapidly diminishing.³ It will be seen, in a graph on p. 319, representing data in Table v, that the banks' proportion of liquid assets to deposits fell from a satisfactory 29.2 per cent in the December quarter of 1928 to a highly unsatisfactory 19.0 per cent in the same quarter of 1929. Nevertheless they began to take up treasury bills. Not that these were really much more liquid, at that period, than overdrafts which were the usual form of accommodation; for no market in bills existed and there was no certainty what the central bank's policy might be towards rediscounting them. However, the bills looked more respectable than overdrafts in a bank's balance sheet, and the banks took them—under *dureesse* and *faute de mieux*. The rate they charged was 5½ per cent,⁴ the average rate on advances in that stringent period being between 6 and 7 per cent.

During 1930 economic conditions continued to deteriorate, although the liquid position of the banks improved. The Governments were still in extreme difficulties and kept coming to the banks for aid. By the December quarter the issue of bills had, as Table iv shows, risen to £A 9.0 millions. In December the banks, including the Commonwealth Bank, conferred on the matter and, in order to prevent further pressure on individual banks by the various Governments and in order to regularize the whole position regarding short term debt, they stated that in future they would only discount bills that were approved by the Loan Council. Thus the whole of government borrowing, short and long, (although not the borrowing of semi-governmental authorities) was brought under the aegis of that body. To the Loan Council the banks felt able to put up a common front against possible excesses of the treasury bill issue. With this protection the banks were willing to increase their holdings to £A 20.6 millions by the end of June, 1931.

The year 1931 witnessed the great change in the liquidity of

³For a more detailed description of the behaviour of the Australian banks during the period 1929-38, and a comparison with the behaviour of the Canadian banks, see B. A. Plumptre, "The Australian Banks in Depression and Recovery" (*Canadian Banker*, April, 1939).

⁴The rates on treasury bills will be found together with a chronology in Table iv in the Appendix.

treasury bills. That was the year of emergencies: of the chief exchange depreciation (January) and the introduction of the Premiers' Plan (June). Part of this Plan was the reduction of interest rates and the relief⁹ of credit stringency. While definite plans for future budgetary balance were laid down, an immediate outlay on public works was contemplated in order to support the national income. Accordingly in July the rate of interest on treasury bills was reduced from 6 to 4 per cent and the Commonwealth Bank undertook to redeem bills at maturity if necessary and to rediscount them before maturity at a rate not more than $\frac{1}{4}$ of 1 per cent removed from the rate of issue.

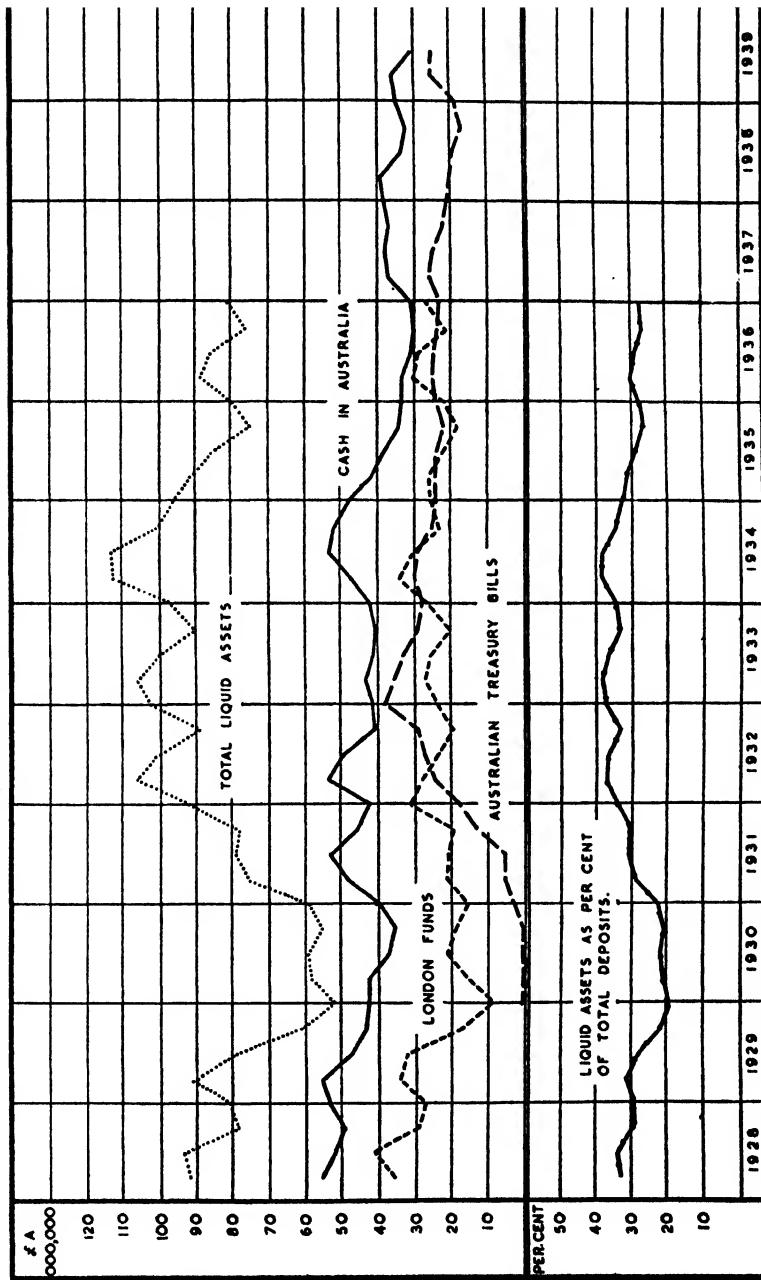
The issue of treasury bills then expanded very rapidly, reaching £A 50 millions in 1932. For the Governments they were a present help in trouble, because the country was still in deep depression. The trading banks now welcomed them, because the Commonwealth Bank's guarantee endowed them with real liquidity (marketability). Indeed they soon considered treasury bills as part of their general liquid assets ranking together with cash, deposits in the central bank, and London funds.

Methods and Results. The system of issue has always been that the Commonwealth Bank takes up the whole of each issue sponsored by the Loan Council, itself determining the rate of discount. The Bank keeps such part of each issue as it sees fit and distributes the remainder to the trading banks, usually but not always allocating the bills to each bank roughly in proportion to its size or to the volume of its deposits at the central bank.

An issue of treasury bills of a given amount affects the trading banks' liquid assets by a similar amount. If the Commonwealth Bank kept the whole issue the result, after the Governments had expended the funds raised by the issue, would be just the same as open market purchases by the central bank: the reserve-deposits of the trading banks would be increased. If the Commonwealth Bank then sold part of the issue to the trading banks they would use up, for these purchases, part of their increased reserve-deposits and would receive liquid treasury bills. The quantity of their liquid assets (including both reserve-deposits and treasury bills) would remain unchanged by this second operation; to the extent that they received bills they would give up reserve-deposits. The change in the components of liquid assets would, however, be of significance

LIQUID ASSETS OF AUSTRALIAN TRADING BANKS, 1928

Figures in Table v in the Appendix



to the banks; for treasury bills yield revenue and reserve-deposits yield none. Naturally, other things being equal, the banks prefer to earn something rather than nothing on their liquid assets.

The banks have made much of the fact that the revenue on treasury bills enabled them to reduce interest charges in the difficult days of 1931-2. But radical critics have seen a government subsidy to the banks in these payments to them on their liquid assets; and indeed while the Commonwealth Bank's guarantee of rediscount lasted the situation was not far removed from one in which the banks received interest on cash reserves. They had raised a hue and cry when, a year or two earlier, the Labour Government had threatened an inflationary increase in the note issue; but they were by no means displeased when the introduction of treasury bills produced a similar increase in their liquid reserves in a more orthodox, more controllable, and, withal, more profitable manner.

From what has been said it will be seen that the Commonwealth Bank kept itself in a position to influence the quality of the liquid assets of the banks collectively and individually. By the same means it influenced their revenues. These things it did by its policy in distributing existing issues of bills. Further, in so far as it could influence the Loan Council (and it has exercised the most direct and important of all outside influences upon that body) it might influence the total quantity of bills and thus the total liquid resources of the banks. It will therefore be clear that the system gave a good deal of power and responsibility to the Commonwealth Bank. Since the Bank has not published any set of guiding principles regarding its distribution of bills, the use of its power has smacked of the arbitrary.

To the trading banks also treasury bills have opened up new possibilities. If each bank had any certain means of obtaining the bills it wanted, it could set out redistributing its liquid assets in the way which seemed most liquid and at the same time most profitable. The fact that the Commonwealth Bank allocates the bills more or less arbitrarily largely precludes this; but in a measure it may be possible in so far as the Bank holds to certain rules such as distributing bills in proportion to the deposits each bank holds with it. In so far as this can be relied on, any trading bank can sell London funds to the central bank, obtain deposits there in exchange, and in due course find its holdings of treasury bills increased by some

more or less predictable amount. Conversely by buying London funds from the Commonwealth Bank it can incur some reduction of its treasury bills. Differences in yields on London funds and treasury bills are thus emerging as a factor of significance to the trading banks and the central bank. If a market or system of issue by tender develops, under which each bank can buy the bills it wants at a price, relative rates will increase in importance. At present few prominent Australian bankers, perhaps only one, are much concerned over the profits to be made, either on discount rates or exchange movements, by moving funds to and fro; for the tradition of relying largely on London funds for liquidity is a strong one.

The Fight for Funding. In July, 1932, the Commonwealth Bank first disclosed apprehension regarding the excessive use of treasury bill finance and suggested that funding was desirable. The retirement of bills, whether from the proceeds of current taxation or from the proceeds of a public (funding) loan, would have reduced the liquid assets of the trading banks, just as the issue of bills had increased them. By the end of 1931, thanks to the new treasury bills, a rise in London funds, and a continuing decline in advances, the banks were in an extremely liquid position, their liquid assets being over 35 per cent of their deposits. But the country was still deeply depressed during 1932, and a policy which would diminish the liquidity of the banking system was opposed by most economists and some of the trading banks. Nevertheless the Commonwealth Bank was persistent, showing that it regarded the treasury bill issue as an emergency episode and an undesirable one. In October, 1932, it succeeded in persuading the Loan Council to fund £A 4 million; only one-third of the amount it had recommended but no doubt more satisfactory to it than nothing.

About this time the Commonwealth Bank began to be less generous to the trading banks in regard to bills. Perhaps it desired to make the system of bill finance less popular with them. Not only did it reduce the rate of discount four times in eight months, but it considerably diminished the proportion of the outstanding bills which it distributed to the banks. Then, in June, 1934, it took the important step of withdrawing its guarantees of redemption and rediscount; promising only in future to quote a rate of rediscount if approached on the matter. Despite this withdrawal of guarantees

the trading banks continued to regard treasury bills as liquid assets.⁵

During the same period (1933-4) the Commonwealth Bank, in its attempt to restrain the use of treasury bills, limited the purposes for which they could be issued and also promoted small refunding operations. In February, 1933, it arranged with the Loan Council that in future bills should no longer supply funds for capital outlays, but only for current deficits. In November £A 5 millions were refunded, and in June, 1934, a further £A 3.5 millions. Since these refundings were offset by current government deficits of roughly the same amounts, the total volume of bills failed to decrease. In the latter month, therefore, the board of the Commonwealth Bank announced that it would no longer take up bills to cover current annual deficits, but only, in order that the aggregate should not increase, amounts sufficient to tide over the normal seasonal lag of revenues behind expenditures. In October of the same year the Loan Council refused to undertake further refunding; so the volume of bills remained steady, the result of evenly balanced opposing forces between the Loan Council and the Commonwealth Bank.

Public Controversies over Funding. For some years following 1933 the reduction of treasury bills was the central issue of Australian monetary policy, discussed not only by the Loan Council, the board of the Commonwealth Bank, and in financial circles, but by economists, parliamentarians, and others. Writing on the subject in 1933 Mr. R. G. Casey said:

The last Loan Council meeting [in December, 1932] showed some difference of opinion as to policy. The Premier of New South Wales [Mr. Stevens] developed an argument for the continuance of Treasury bill finance for a further period. The Commonwealth Government, together with the Chairman of the Commonwealth Bank [Sir Robert Gibson] and the Premiers of the other States, favoured the flotation of a £20,000,000 public loan [to be underwritten by the banks] at 4 per cent, some considerable portion of which was to be used for the retirement of Treasury bills and the balance for public works. A compromise was reached, and a public loan of £8,000,000 at 3½

⁵The continued reliance of the trading banks upon the Commonwealth Bank for rediscounting facilities is an action which perhaps speaks louder than the many words of distrust which, in recent years, they have voiced regarding it. One recalls particularly their forebodings over the suggestion that the central bank might be legally empowered to acquire minimum deposits from them.

per cent. was attempted. It was a partial failure. The Premier of New South Wales is supported in his views by the Bank of New South Wales and by the majority of the economists of consequence in Australia.*

At the time of the Royal Commission on Monetary and Banking Systems, appointed in 1935, the matter was still controversial. By that time Australia had regained prosperity, the rise of wool prices in 1935 having given a most important impetus. Bank advances, as Table v in the Appendix shows, had regained the ground lost since 1929. The liquid assets of the banks were sinking below 30 per cent of deposits to a level at which bankers were considering tightening credit. Under these conditions the case for maintaining the volume of treasury bills and credit lay primarily in arguments against disturbing the existing state of prosperity. The level of London funds was fairly comfortable but not as high as it had been in the late nineteen-twenties, and those who argued for maintaining or even increasing the volume of treasury bills were either hopeful that London funds could be replenished by borrowing abroad or else were willing to contemplate further exchange depreciation if continued prosperity and high imports produced a drain. Arguing along such lines as these were to be found a number of political leaders, notably the Premier of New South Wales, also Mr. Davidson, the General Manager of the Bank of New South Wales, and most of the country's economists.

In favour of reducing the treasury bill issue were the Commonwealth Bank and most financiers. The most able exponent of this view amongst economists was Professor Melville of the Commonwealth Bank. The crux of his case was that the treasury bills, a local asset, had replaced gold and London funds, an international asset, as part of the credit base of the banking system (see chart on p. 319); and as long as local assets were plentiful the country would not accumulate international assets to the extent it had done in the prosperous period of the previous decade. He apparently did not fear that funding would cause a serious decline in business conditions; but believed that a mild recession would suffice to permit London funds to accumulate. On the other hand, he distrusted both foreign borrowing and renewed exchange depreciation as methods

*Article by R. G. Casey, Feb. 2, 1933, reproduced by Copland and Janes, *Cross Currents of Australian Finance*, pp. 317-18. Mr. Casey became Commonwealth Treasurer in 1935.

of regaining London funds if a large volume of the existing ones were lost; indeed he seemed to believe that a *constant* volume of treasury bills would result in *successive* bouts of depreciation.

Into the rights and wrongs of these arguments we cannot go here. They have been briefly summarized so that the reader may appreciate their general trend. Fundamentally, they exhibit the conflict between the nationalistic proponents of modern monetary management and the more conservative point of view with its emphasis on stability of exchange and maintenance of a sound international position. Between the two schools of thought there is a great gulf fixed.

An Abortive Offer by Tender. Controversy has existed, not only regarding the volume of treasury bills, but also regarding the method of issue. Conflicting views regarding the volume came to a head over an attempt to introduce a new method of issue in March, 1936. For some years there had been discussion of the advisability of distributing bills to the banks and others according to the results of secret competitive tenders. The Commonwealth Bank decided to take a step in this direction and announced that bills amounting to £A 1 million would be offered to the public, *excluding* the commercial banks. Tenders were called for; but not, as is usual elsewhere, at competitive scales of prices. The Commonwealth Bank retained the right to fix the rate of discount. In this it was following the instruction of the Loan Council which apparently feared that short term rates would be forced up by competition. The Commonwealth Bank chose a rate of 1½ per cent, which was ¼ per cent above the trading banks' rate for fixed deposits of the same (three months') currency as the treasury bills.

If the central bank's sale of its holdings of these securities had succeeded the trading banks' reserve-deposits would have been diminished by a like amount. As already pointed out, the banks had by this time no liquid assets to spare; and the Bank of New South Wales, largest and most independent, took action to prevent any loss. It raised its rates on three month deposits to exceed by ¼ per cent the rate on the treasury bills being offered. The result was that only £A 315,000, out of the £A 1,000,000, were sold and the issue was considered a failure. The other trading banks and the Commonwealth Bank soon raised their deposit rates into line with those of the Bank of New South Wales; for the credit situation was

tightening and a bank with rates higher than the remainder might have drawn deposits away from them.

It is a pity that the circumstances under which the experiment was made were not more propitious. It failed partly because it was so undertaken that it would have produced some contraction of the banks' liquid assets as a by-product, partly because the Loan Council was unwilling to throw the system completely open to market conditions, wishing instead that the central bank should retain control of the discount rate, and partly because the trading banks, and notably the Bank of New South Wales, were unsympathetic towards the general policy and specific methods adopted by the Commonwealth Bank. The chief objections to further experiment seem to have come from the Loan Council and conservative financial circles. The Royal Commission, reporting in 1937, recommended renewed progress towards issue by tender, and in this it followed the recommendation of both the Commonwealth Bank and the Bank of New South Wales. The Loan Council apparently objects on the grounds that rates on government borrowings would rise. In the short run it is probably right; but in the long run almost certainly wrong.

Conclusion: Experience with Australian Treasury Bills and the Canadian Finance Act. The introduction of treasury bills which could be rediscounted at the Commonwealth Bank brought a great change in the Australian banking system, and like all great changes it has been attended in various quarters by derision, distrust, and delight. As so often is the case, this particular change was largely unintentional, the accidental product of an emergency. The new terms under which bills were issued after June, 1931, were designed primarily to meet the pressing financial problems of the times; but they resulted in a new and permanent source of liquidity for the Australian banks.

The results are in some ways comparable to those of the Canadian Finance Act.⁷ It, too, was designed to meet a sudden emergency, and remained to provide a new source of liquidity. Both innovations were welcomed by the commercial banks and particularly by those whose policies of expansion were most aggressive. The Finance Act in Canada and treasury bills in Australia have

⁷A description of operations under this Act will be found in chap. xi, section (4).

both played an important part in permitting the commercial banks to increase their independence of foreign capital markets—a part which treasury bills may ultimately play in Canada now that the Finance Act is no more. In both countries the innovations were accepted and even welcomed by the Governments concerned: treasury bills because they provided cheap credit for needy Australian Governments, the Finance Act because it provided, through its interest charge, a small amount of revenue and, through possible reductions in the charge, a bait with which to tempt the banks to take up special government security issues from time to time.

A danger lay in the popularity of the new facilities with both debtors and creditors, the danger of excessive use; and therefore they were regarded with some misgiving by those who were concerned with or responsible for the countries' monetary policies. In Australia the Commonwealth Bank has leaned, perhaps too far at times, away from the extensive use of treasury bills; and many advocates of central banking in Canada, including ultimately the head of the Treasury itself, regarded possible abuses of the Finance Act as the most disturbing factor in existing monetary conditions. The dis-harmony and distrust which these divergent views engendered between the commercial banks and the central authorities showed itself in Canada over the whole question of the establishment of a central bank; whereas in Australia it emerged in discord of words and acts between the central bank and certain commercial banks.

As long as the present system of issue exists in Australia treasury bills are likely to be a focus of discontent. It is extremely difficult for the Commonwealth Bank to satisfy the Governments and Loan Council on the one hand and each of the trading banks on the other, and at the same time to secure the proper volume of issue and the proper distribution between itself and the individual trading banks. These matters involve many decisions which by nature must be somewhat arbitrary. Decisions involve the exercise of power, and from this point of view the Commonwealth Bank might wish to make them; but they also involve responsibility and in this case odium. Many, perhaps most, of the more delicate decisions could be avoided if a satisfactory system of issue by tender and some sort of open market could be established. The one attempt to reach this goal, made in 1936, seems to show that it is a task requiring more tact, tolerance, and foresight than was at that time forthcoming

from the various parties concerned. None the less it is a goal worthy of pursuit for it is the experience of more than one central bank that, although personal banker-customer relationships cannot entirely be avoided and carry with them certain compensations, dealings in an impersonal open market are generally preferable where matters of monetary policy are involved. If the Australian authorities can succeed in establishing a market based upon issue by tender their control of financial conditions should in the long run be more sensitive and less contentious.

(3) CANADA

In recent years the business of banking in Canada, even more conspicuously than in Australia, has become less dependent on liquid assets abroad. At the end of 1927 the foreign assets of the Canadian banks exceeded their foreign liabilities by some \$293.4 millions; at the end of 1938 the figure had sunk to \$8.7 millions. The loss of these liquid assets was greater than the whole of their cash reserves at the earlier date.

Nevertheless, on most criteria the Canadian banks were in a more liquid position in the later year than in the former, and the new sources of liquid assets were entirely local. Between these years the annual average of the banks' commercial loans (the chief form of relatively illiquid asset apart from banking premises, etc.) fell by \$639 millions; and their holdings of marketable securities, which Canadian bankers class high amongst liquid assets, rose by \$919 millions. Moreover, their cash proportions were slightly lower in 1927, and even then an appreciable amount of their cash was borrowed from the Government under the facilities of the Finance Act while in 1938 the banks' reserves were entirely free from the shadow of such indebtedness. The only factors which might be considered to lessen the relative liquidity of the banks at the later date were these: first, that at the earlier they could, in fact, borrow under the Finance Act practically without hindrance, whereas at the later their recourse to central bank loans or rediscounts was subject to the scrutiny of the Bank of Canada; and second, that the banks are having increasing misgivings regarding the liquidity of government securities.

In producing the liquid position of the banks at the later date treasury bills played a part, although not the most important one.

Amongst their increased investments of \$919 millions the banks included their treasury bills. The total issue of bills in 1938 fluctuated between \$150 millions and \$160 millions; issue by tender had begun in 1934 and the total volume had reached this size in 1936. Although no authoritative statement is available regarding the distribution of holdings it is almost certain that the central bank has been easily the largest single holder.⁸ Nevertheless a substantial amount, perhaps—at a guess—rather more than half, has been in the hands of the commercial banks. Far more notice would have been taken of their holdings of these bills if the banks had not been extremely liquid on other accounts.

It is difficult to tell how securely treasury bills have made their place in the Canadian financial structure and particularly in the liquid assets of the Canadian banks. Australian experience suggests that these bills are very popular with banks and that they may well have come to stay, but in Australia there were relatively few short term gilt-edged securities available. The Governor of the Bank of Canada has expressed some apprehension regarding the status of treasury bills. In 1937 he said:

I referred last year to the desirability of an active bill market, and expressed the hope that we should make some progress towards the establishment of such a market in this country, at least in so far as Dominion Government Treasury Bills were concerned. One must recognize, however, that the goal is a long way off. I feel it is quite likely that if money conditions ever become less easy than they have been in the last few years, Treasury Bills may be rather neglected, and that holders may tend to allow their Bills to run off through a desire to obtain additional cash. Such a development would call for the refunding of a suitable portion—perhaps a substantial portion—of the Bills now outstanding. The market would then be short of assets which can properly be classified as second line reserves. I think it is

⁸In his annual address to the shareholders, Feb. 22, 1938 (published by the Bank, p. 9), the Governor of the Bank of Canada spoke as follows: "Our holdings of treasury bills varied widely during the course of the year [1937]. An indication of the extent of these fluctuations is given by the figures of our weekly and monthly statements under the heading of 'Dominion and Provincial Government short term securities,' the bulk of which at the present time consists of Dominion Government treasury bills. Investments in the category to which I have referred rose from \$63.3 millions at the end of September . . . to . . . \$94.8 millions at November 30th. . . ."

probable that experience over a period of years, and of a variety of conditions in the money market, will be necessary before we achieve a satisfactory bill market in Canada.⁹

(4) DEVELOPMENT OF BILL MARKETS

In conjunction with the establishment of central banking in the Dominions hopes have been expressed in many quarters that bill markets would develop. Such markets, it was widely believed, would be of great assistance for they would provide the type of liquid security most suitable for a central bank to deal in and to hold. It was suggested in section (4) of the Introduction that a central bank did not need to keep itself liquid on all the grounds commonly supposed; but nevertheless its control of monetary affairs is facilitated if it can easily buy, sell, and hold short term investments of high quality.

Commercial bills. Two types of bill would serve the purpose. The better, no doubt, would be commercial bills. Bankers of the old school prefer them to treasury bills because they are self-liquidating, because they represent or are based upon an actual movement of goods through the channels of trade and production, and, perhaps above all, because they are free from the taint of government borrowing and government debt. For central bankers commercial bills have an added advantage in that they are normally bought and sold on an open impersonal market while treasury bills, however open the market and however impersonal the system of issue, are after all the obligations of the central bank's chief customer and ultimate master—the Government.

In only one Dominion, to wit South Africa, has the central bank made a persistent attempt to foster the use of commercial bills and thereby to lay the basis of a market in them. Some progress was made in popularizing the bill as an alternative to the overdraft which is the normal type of credit extended by the South African banks; but no progress was made in establishing a bill market. Central bankers cannot stem the ebbing tide of commercial bills.¹⁰ The use of bills rose to its height in the nineteenth century and in

⁹*Report of the Annual General Meeting, February 23, 1937*, published by the Bank, p. 13.

¹⁰See chap. I, section (3); also the evidence of A. C. Davidson, General Manager of the Bank of New South Wales, to the Royal Commission on Monetary and Banking Systems in 1936, published by the Bank, pp. 41-6; also M. H. de Kock, *Central Banking* (London, 1939), pp. 191-4.

the London money market. It was based upon a rapid development of international trade, for which England acted both as commercial entrepôt and financial centre—two activities which were not dissociated. It was also based on relatively small scale banking and upon nineteenth-century methods of communication. Nowadays, with the growth of branch banking and the improvement of communications, it has generally been found desirable to replace the bill of exchange in its credit function by the more convenient loan or overdraft and in its foreign exchange function by telegraphic transfer of funds between countries. A further blow to the system of bill finance has been dealt by the post-War declines in international trade.

Thus it came about that, with the War, the bill of exchange gave pride of place to the treasury bill even in London. And as in London so also in other European financial centres which had been or had hoped to become international bill markets. So too in the United States, where the market in "acceptances" (as they are called there), which has been sedulously fostered by the Federal Reserve System, has always leaned rather lamely upon its foster-father. So, too, in the Dominions where the banks probably do nowadays a (relatively) far smaller business in commercial bills than they did before the War. Such at least is the experience of one of the biggest of them.¹¹

Treasury Bills. For extended use of treasury bills there is more hope. It is not difficult to create a supply nowadays, what with periodic difficulties in the finances of most Governments and their almost continuous search for new sources of loan funds. As for a demand, this too is not very difficult to foster; because such liquid short term investments as treasury bills are likely, in the uncertain world of today, to be popular with banks and other financial institutions as well.

The treasury bills themselves, especially if they are liquefied by rediscount facilities, are likely to be more popular with the leading financial institutions than is an open, competitive market in them. Competition, and especially the type of competition which is fostered by selling the bills by secret, competitive tenders, is almost sure to produce rates lower on the average than the ones set by the banks in collaboration for short term loans to Governments. Amongst Canadian institutions investing in treasury bills there has

¹¹A. C. Davidson, *ibid.*, pp. 44-5.

been chronic discontent with the low rates obtained from them.¹² If the banks have ever attempted to form a common policy in the matter of tenders in order to raise rates to levels that seemed to them reasonable the effort has obviously failed. In other Dominions the banks have more successfully defended their monopolistic position in the provision of short term credit through treasury bills. In Australia and in South Africa they have prevented the sale of bills to others than themselves.¹³

While the central bank and the Government cannot create a bill market where the fundamental conditions for its operation have not yet been developed, or where entrenched interests can effectively oppose it, they can nevertheless facilitate its growth. Concerning this subject the Deputy Governor of the South African Reserve Bank has written as follows:

For the purpose of an open market the following conditions have been found to be more or less essential, namely, a sufficient volume of Treasury bills; a not too uneven or irregular flow of maturities; the offer of Treasury bills to the banks and the general public on a weekly, fortnightly or monthly tender basis, preferably under the ægis of the central bank which should also be allowed to tender; the use by banks of Treasury bills as a secondary reserve; and an undertaking by the central bank that it would always be prepared to discount Treasury bills for third parties at a rate not far removed from the current rate at which such bills are issued. The establishment of one or more bill dealers or brokers would be of great assistance, but not essential, to an open market.¹⁴

The nearest approach to a treasury bill market in the Dominions is to be found in Canada. The issue of bills by competitive tender every fortnight was instituted a year before the Bank of Canada began operations and resulted, as the Treasury intended, in a sharp reduction in the rate paid by the Dominion Government on its short term accommodation. But the system was also instituted for the benefit of the nascent central bank; and its Governor, in his first

¹²The weighted averages of the rates obtained by successful tenders were as follows:

1935.....	1.47 per cent
1936.....	0.84 per cent
1937.....	0.72 per cent
1938.....	0.59 per cent.

Considering that there is no open market in these securities the yields certainly seem very low.

¹³See chaps. I and II and section (2) of this chapter; also de Kock, *Central Banking*, pp. 247-9.

¹⁴*Ibid.*, p. 251.

annual report, emphasized that "one should not think of such bills as being merely a means of cheap governmental financing and nothing more."¹⁵ The largest holder has been, as already mentioned, the central bank; and most of the remainder have gone to the commercial banks, although some have gone to other institutions. Some of these were situated in the United States, where the rates on treasury bills were so much lower even than in Canada that it was a profitable transaction to move funds to Canada and hedge against movement in the exchange rate rather than invest in similar securities at home.¹⁶ Trading in Canadian treasury bills has not been active although encouraged by the Bank of Canada both by advice and example. The development of the market depends upon a widened distribution amongst the various financial institutions. The very low rates prevailing on treasury bills have probably retarded development.¹⁷ At these rates very few buyers were interested; the great majority of those issued to the public have gone to the three or four biggest banks. With so few holders one cannot be surprised that an active market has not emerged. To some extent, therefore, the action of the central bank in placing large tenders at low rates has run counter to its expressed desire for a wider market.

It is probable that holding treasury bills, and ultimately trading in them, will gradually gain in popularity in the various Dominions. This is most likely in Canada, where there is already an active market in other short term government securities. But for that very reason the introduction of a treasury bill market is the less necessary for central banking purposes. In short, a market in treasury bills is likely to develop in the Dominions along with, and not apart from, other departments of their capital markets. Regarding the general development of capital markets as a product of economic maturity enough has already been written.¹⁸

¹⁵*Report of the Annual Meeting, 1936*, p. 17; also statement by the Minister of Finance, *House of Commons Debates* (unrevised), Feb. 25, 1937, p. 1338.

¹⁶Investors from abroad prefer to buy bills from Canadian holders rather than put in tenders when an issue is forthcoming. By this means they can arrange a perfect hedge, knowing simultaneously the prices of both bills and exchange futures and the volume of the transaction. When placing a tender they do not know how many bills they will be assigned, nor at what rates, and thus they cannot arrange for satisfactory hedging facilities at the same time.

¹⁷See the evidence of the Governor of the Bank of Canada to the House of Commons Committee on Banking and Commerce, 1939, pp. 410-11.

¹⁸See especially section (2) of the Introduction, chap. v *passim*, and the final section of chap. ix.

PART IV

OBJECTS AND OPERATIONS: INTERNATIONAL

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CHAPTER XIV

FOREIGN EXCHANGE RATES AND INTERNATIONAL PAYMENTS

(1) THE FISSIPAROUS POUND AND DOLLAR

NOT long ago a pound was a pound the world over; it was difficult if not impossible to distinguish the pound of Great Britain from the currencies circulating under the same name in other parts of the Empire. The mints established in imperial outposts were branches of the Royal Mint. The banks operating in Australia, New Zealand, and South Africa never distinguished, in their balance sheets, between pounds of various types, holding assets and liabilities in one country or another without discrimination. The British sovereign was legal tender everywhere, even in Canada where the system of currency was otherwise in terms of dollars and cents. As for the Canadian dollar, it was scarcely to be distinguished from the American; the Canadian banks kept most of their outside assets in New York, and American gold coins were legal tender—indeed they apparently still are according to the letter of the law.

But the old order has given place. The Dominion Governments, and later their central banks, have all undertaken to issue paper money; and this paper is not generally acceptable outside the country of issue. During and after the War the Dominions experienced their first exchange rate fluctuations. For the first time the Dominions' currency and credit systems stood, for a time, independent and apart. From 1926 to 1928 the old order seemed to have been re-established; but the disturbances which followed caused a new and probably permanent cleavage amongst the currencies. An Australian banker, referring to the decline of the Australian pound in 1930, spoke rather sadly but clearly of the break: "We had always listed [sterling] on a commission basis before, and then we found that we were only a sub-currency after all."¹

¹Cholmondeley Darvall, General Manager of the Commercial Banking Company of Sydney, Evidence to the Royal Commission on Monetary and Banking Systems in Australia, 1936.

The past twenty years have been notable for currency instability throughout the world and in a measure the new conditions in the Dominions reflect the general position. But for the Dominions' currencies the recent situation has contained special elements of novelty. The pound sterling, the franc, the mark, the guilder, the dollar, these currencies have long histories; histories in which gold, silver, debasement, bimetallism, limping standards, and periods of inconvertibility all played their respective parts. It so happened that, in the pre-War period, under the aegis of the international gold standard, all these currencies enjoyed a period of stability in terms of each other and of gold. Recent events have introduced divergences, not new in themselves but only in their extent and violence. The case of the Dominions' currencies, however, is different in that in the process of divergence they have been born. Like the amoeba, the pound and the dollar have been fissiparous; producing offspring by the simple and imperceptible process of splitting off, of becoming two or more instead of one.

(2) INTERNATIONAL PAYMENTS: DIFFICULTIES OF ADJUSTMENT

It is often said of a country that "it is having difficulties in balancing its international payments." Of what do these difficulties consist? How may they be measured? How surmounted? Are the Dominions peculiarly susceptible to them?

Nature and Estimation of Difficulties. Difficulties arise in the foreign exchange market when there is a strong tendency for the demand for foreign exchange to outrun the supply. A tendency for supply to outrun demand might also create difficulties but for the time being at least we shall not bother ourselves with the nature of such an *embarras de richesse*.

The excessive demand for foreign exchange may be met in two different ways or by some compromise between them. In the first place the exchange rate may be allowed to depreciate. The rise in the prices of foreign currencies will normally set forces in motion to eliminate the excess by restricting the demands for exchange and encouraging supplies. The extent of the difficulties may be judged roughly by the extent to which the exchange has to depreciate in order to restore equilibrium in the exchange market. The difficulties will be transmitted to the inhabitants of the country in the

form of higher costs of imports, higher costs of servicing foreign debt, and so forth; the more the exchange depreciates, the higher the prices of foreign currencies rise, the greater these will be. One can conceive of cases in which the difficulties may be insurmountable; and in such cases the country's currency would progressively depreciate until it became valueless. The German mark after the War may have been an example of this occurrence. But usually there is sufficient elasticity or responsiveness in demand and supply to restore equilibrium after some degree of depreciation. Other aspects of depreciation as a means of meeting exchange difficulties will be discussed in Chapter XVII.

The other way of meeting exchange difficulties is that which is usually employed when the authorities are unwilling to allow the exchange to depreciate. In order to meet and restrain the excessive demand for exchange three steps may be taken. The first is a temporary expedient, the second involves indirect interference in the normal affairs of business men and bankers, and the third involves direct interference. These steps are: (1) The banks or monetary authorities may sell foreign exchange² at a fixed maximum price, thus preventing the market price from going any higher. If their reserves of exchange run short, however, other methods will have to be introduced. (2) A general restriction of supplies of money and bank credit may be undertaken. If the banks regard holdings of foreign exchange as reserves this restriction will occur, at least in part, automatically. The general contraction of credit will produce, as Chapter VIII indicated, a lowered volume of incomes and employment, a lowered level of costs and prices. These changes will diminish imports and may encourage exports, and will thus remedy the shortage of foreign exchange. Moreover, the restriction of local credit facilities may produce an inflow of capital or discourage an outflow. (3) But if indirect measures fail to relieve the shortage, or if they are considered for some reason undesirable or inappro-

²If gold (or any other cheaply transportable commodity) is bought and sold at fixed prices by monetary authorities in more countries than one this will also result in exchange stabilization between the countries concerned; for any dealer may then buy gold (at a stated price) in one country and sell it (at a stated price) in the other, thus indirectly exchanging one currency for the other at a stated price (after deducting the cost of transfer of the gold from one country to the other).

priate, more direct ones may be introduced. These will consist of various measures, such as tariffs and quotas and prohibitions, designed directly to limit and ration the demands for exchange. They may also consist of bounties, direct or concealed, designed to encourage exports.

With a stable exchange rate the extent of the difficulties encountered in the exchange market may be roughly gauged by the extent to which the more extreme measures have to be used. When the excessive demands can be met merely by sales of part of the foreign exchange reserves of the banking system, the difficulty is not severe. If, however, it precipitates acute credit restriction, unemployment, and depression, and if it becomes necessary to impose tariffs and quotas to restrict the excessive demands, then the difficulties are of the first magnitude. They are transmitted to the country's inhabitants in the high prices or absence of certain types of imports, in reduced incomes and in unemployment.

Susceptibility of Young Countries. It is sometimes suggested that young countries producing staple exports are peculiarly liable to difficulties in their foreign exchanges because of the wide swings in the prices of exported commodities, such as wheat and wool and most minerals, and because, in the case of agricultural and pastoral products, the weather introduces further instability. With the chief source of supply of foreign exchange so variable, frequent difficulties must surely arise in adjusting the demands and other supplies to its movements.

Now in a measure this picture of the exchange difficulties of the Dominions is a true one but it is easily exaggerated. Moreover, a glance at the history of the Dominions' foreign exchanges suggests that for the most part they have not experienced great difficulties. The exchange rates have remained so stable that people hardly considered that they were exchange rates. It is interesting to inquire, therefore, how the difficulties which nowadays seem so conspicuous have arisen and wherein they lie.

A Classification of the Sources of Supply and Demand. In order to elucidate these matters it is convenient to divide the factors of demand and supply into three or four groups.

A. Spontaneous factors. In this group we have the factors which play an active, spontaneous, causal role. In the short run at

any rate, these factors vary (or in some cases remain constant) without much direct reference to, or dependence upon, the remaining factors in the market. Typical of them is the value of commodity exports. Debt service, because it is largely impervious to what is going on in and about the exchange market, should also be included; although the adjectives "active" and "spontaneous" are clearly inapplicable.

- B. *Associated factors.* This group consists of those which are in some direct, economic manner associated with the former. For instance, if exporters normally spend a portion of their receipts on the purchase of imports, then to this extent the factor of imports is associated with exports. Imports may be expected to fluctuate in harmony with exports. This association may result from technical causes (England's imports of raw cotton are associated with her textile exports) or else from the spending habits of consumers.
- C. *Adjusting factors.* These factors are the ones which, in the absence of severe dislocations, can be relied upon to adjust demand to supply; that is to compensate for (net) disparities in the other factors. The purchase and sale of foreign exchange or gold by the banking system, and other short term capital movements of a compensatory type, are included here. For the most part these movements are "automatic," depending upon the play of business, profit-seeking motives; but on occasion the monetary authorities may deliberately intervene to secure adjustments.
- D. *Temporarily passive factors.* In the long run all the factors in this group respond either to the repercussions emanating directly from the autonomous (A) factors or else to the monetary influences which are set on foot by the fluctuating exchange rate or the change in the foreign exchange reserves of the banking system. Thus they all become either B or C factors if sufficiently long periods are considered. However, it is often important to consider much shorter periods of time,—a few months, or a year or two—and for such periods some factors in the market will remain unresponsive to active movements and to the monetary changes they produce. For instance, if the exchange rate or monetary conditions altered on account of an alteration in the

value of exports, the response of imports, tourist traffic, etc., might take some time to materialize at all and some further time before most of the response had taken place. Thus the existence of D items is important in explaining the lags in supply behind demand and demand behind supply; and these lags are, as we shall see, of the greatest importance to central banks.

Two points must be mentioned in regard to this classification before putting it to use. It is not necessary that an item in the balance of payments should always appear in the same category. For instance, between 1931 and 1938 Canadian gold exports, which consisted practically entirely of newly mined gold, belonged in category A. Before 1931 some gold movements, additional to the export of current production, were reflected in changes of the country's gold reserves. These belonged in category C because they were residual or adjusting items in the exchange market.

Similarly long term capital movements may appear in more places than one. In Professor Viner's treatment of *Canada's Balance of International Indebtedness, 1900-1913*, long term capital movements were assigned to category A and almost all the remainder to C.³ On the other hand, the recent outward movements of long term capital from Canada are almost certainly best regarded as adjusting (C) and in part as associated (B), with exports constituting the chief spontaneous (A) items. Again, turning to South Africa, recent capital imports for mining and other development may be regarded as spontaneous (A), but the contemporary outflow

³Professor Viner recognized that some Canadian borrowings in foreign centres (A) were directly expended upon the import of materials (B). But in general the classical theory of international trade has under-emphasized the B factors, laying its chief stress on the monetary factors which promote adjustments (the C factors and the forces transforming D into C). The object of the present treatment is to emphasize the existence of B factors, the movements of which seem important in producing adjustments.

It is doubtful how far capital movements ought ever to be considered as spontaneous (A) items. The pure theory of international capital movements, in which they are generally so considered, usually leads to the conclusion that exports ought to fall in a country which is borrowing abroad; the "unfavourable balance of trade" being produced by a fall in exports as well as a rise in imports. This conclusion does not conform to the normal course of events, because people do not usually lend to a country (or a business) whose sales are falling. Expectations regarding the future are too greatly coloured by contemporary events.

of capital to redeem government debt in London was in part a deliberate policy of adjustment (C).

It may be gathered that there are not sharp lines between the categories. Moreover, it is not suggested that the spontaneous items are themselves unresponsive, inelastic, to the corrective forces which they set in action. For example, increasing exports, which bring a rise in the foreign exchange rate, will themselves be hindered by this alteration. However, despite the fact that their own responsiveness plays a part in the restoration of equilibrium, it usually remains possible in any particular set of circumstances to distinguish the essentially spontaneous items from the essentially dependent and residual items. And if this can be accepted we may proceed.

Equality of Supply and Demand in an Imaginary Colony. It is useful to conceive of a colony of people sending a staple export to a mother country and bringing back imports. In this community all money incomes are received from the sale of exports, and all incomes immediately spent upon the purchase of imports. To make the picture a little more realistic, we might imagine the inhabitants engaging to some extent in agricultural production for their own consumption; but trading these products amongst themselves chiefly by barter or through book-entries in the local shops.

In such a colony the demand for foreign exchange would always roughly equal the supply; no matter how the values of exports fluctuated the values of imports would immediately follow. There would never be serious difficulties in the foreign exchange market, never much tendency to ship money abroad, because for every spontaneous movement of exports there would be an equal associated movement of imports. The B factors would never diverge much from the A factors; and no serious difficulties, involving the extensive adjustment of C factors, would appear.

Crude as the illustration is, it probably gives the essential explanation why the Dominions, throughout their earlier history, have not experienced greater difficulties in their foreign exchanges. The basic tendency was for their expenditures to vary with their receipts. For the theory of their exchanges this is the simplest case, the first approximation, from which further departures and complexities may appropriately be studied.⁴

⁴See F. W. Paish, "Banking Policy and the Balance of International Pay-

The matter may be put in a slightly different way. Pioneer colonial communities were usually relatively poor; certainly too poor to afford the luxury of "hard money" made out of the precious metals. Imports from manufacturing communities were more to be desired than silver or gold. Thus the monetary history of these communities was a tale of chronic monetary shortage.⁶ Most of the hard money left over from good seasons was soon dissipated and lost to the country when bad years followed. And then came growing demands for some stable system of locally-issued currency which could not be drained away. Upon such surges of demand some of the Dominions' commercial banks were launched; and latterly some of their central banks.

Development of Exchange Difficulties in the Dominions. The growth of an internal monetary or credit system is one factor which allows foreign exchange difficulties to develop. With a local monetary system there may not even be a rough equality between the values received from exports and the amounts which the people wish to spend upon imports. The next chapter suggests that the greater the complexity of the local financial system the greater the likelihood of divergences between supplies (A) and associated demands (B) for foreign exchange.

Other factors also permit divergences to develop. The growth of internal trade and manufacture will mean that incomes received from staple exports may more readily be spent within the country.

ments" (*Economica*, new series, vol. III, 1936, especially pp. 404-11); also by the same author, "Forecasting Foreign Trade" (in *Some Modern Business Problems*, edited by Arnold Plant, London, 1937).

⁶In this regard one may comment on the inapplicability of the quantity theory of money to countries where such conditions prevail. According to this theory there can never be a chronic shortage of money, because the price system will adapt itself downwards until the existing quantity suffices for the community's needs. In colonial areas, however, the basic price level and price structure (import and export prices) is imposed from the mother country, with certain modifications due to transport costs, monopolistic behaviour, etc. For carrying on transactions within the price-limits thus imposed the quantity of hard money which the community feels that it can afford to retain may or may not seem adequate.

Mr. R. B. Bryce has suggested another way of looking at the same thing. The acquisition of hard money amounts to an import of capital upon which interest must be paid. When a community is poor it will not consider the gain in liquidity from retaining the money to be worth the loss of interest.

True, raw materials may have to be imported, and those employed in manufacture and trade may spend part of their earnings upon imports; so that the diversion of purchases to local products may delay rather than eliminate the change of imports which would be otherwise associated with a given change of exports.⁶ But the delay—the period during which the imports are D items rather than B items—may have serious consequences: the authorities may be denuded of foreign exchange, an acute credit restriction may be imposed, an undesired exchange depreciation may be precipitated. In such ways the C items will be brought into play; and the extent of recourse to them is a measure of the short run difficulties which the country confronts. Thus it is that the central bankers of the Dominions must view with concern the existence of a lag between changes in exports and resulting changes in imports.

Important divergences between the demand and supply of exchange may appear on account of foreign debt.⁷ Here is a factor of demand for exchange which at any given time is likely to be extremely rigid; and if supply is variable is almost sure to cause disequilibrium. The act of borrowing funds abroad might also cause inequality: in this case an excessive *supply* of foreign funds. But borrowings usually occur in a period of rising prosperity and rising demand for foreign products, and the only adverse circumstances, the only "difficulties" associated with borrowing are likely to be the outburst of a speculative boom in land and securities and the elevation of living standards above what can be maintained

⁶E. Landsberg writes as follows in reference to the money received from increasing South African gold exports and distributed by the mines following 1932: "Every increase in the money circulation . . . was . . . liable to be balanced by expanding imports at some later date. . . . Roughly comparing the increases in the internal payments of the mines, and in the imports of merchandise, it will be found that it took the Union about one year to enhance its imports to the extent indicated by the higher payments of the mines. With the development of secondary industries, or for any other reason, the time-lag . . . may change" (*South African Journal of Economics*, vol. V, pp. 298-9). This whole matter receives more extended and more precise treatment in the next chapter.

⁷The accumulation of debt is often associated with the development of a more complex economic structure. Tariffs have been imposed in the Dominions with the dual purpose of fostering internal trade and industry and of providing revenues to meet the debt charges incurred by Governments in developmental expenditures. Thus the material of this paragraph may be regarded as another aspect of that of the last.

when economic conditions become less favourable and the borrowing ceases. The problem whether any given "night before" is or is not worth the probable "morning after" is one which is placed in the hands of central bankers; who are supposed to take a sober view of the situation no matter how general the revelry. They may well see "difficulties" in the situation. But ordinary business men and political leaders see relatively little difficulty associated with the expenditure of borrowed money. On the other hand, people are unanimous in seeing difficulties in the repayment of debt.

Conclusion. We conclude that there is some truth in the suggestion that countries producing staple exports are liable to experience difficulties in their foreign exchanges. But the difficulties arise only in part out of the nature of the exports; they arise also out of the financial and economic structure of the country. A country, a colony, which merely exports staple products and which has not yet attained any appreciable local development is not likely to experience exchange difficulties; indeed it usually has no such thing as an independent currency of its own. Its monetary difficulties are likely to be found in a chronic shortage of circulating media. The country that will experience exchange difficulties is one wherein local money and finance have developed appreciably and where trade, transport, and manufacture have been built up with the help of tariffs and of funds borrowed abroad. Exchange difficulties are evidence not of youth but of adolescence: not of colonies but of dominions. Later, with full maturity, comes the ability to lend abroad; and then exchange difficulties are likely to diminish because of the tractability, under normal circumstances, of capital exports.

CHAPTER XV

THE VOLUME OF MONEY INCOMES AND THE DISTRIBUTION OF OUTLAYS

(1) INTRODUCTION: THE VOLUME OF INCOMES

A CENTRAL bank is nowadays expected "to mitigate by its influence fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action. . . ."¹ It is therefore necessary for us to consider the nature and causes of fluctuations in the Dominions. In this chapter, building in part on foundations laid in the last and in Chapter VIII, we discuss the processes through which prosperity may either increase or decrease; in the next we shall be able to consider the whole sequence of movements in a trade cycle.

The relationship between money income and real income deserves a word of explanation. Statistics and other information indicate that in capitalist countries periods of rising money incomes (when profits are increasing, when most wage-earners and salaried officials are getting "raises," and when some are being re-employed) are usually periods in which production of both consumable and capital goods is also increasing. The standard of living, the level of consumption, and the additions to inventories and equipment all tend to rise. In short the community's "real" income usually grows at the same time as its money income; conversely falling money incomes usually coincide with diminished production and real income.

The conformity of movement is not invariable. It is possible, and sometimes happens, that a community's money income goes on growing after the limits of its productive capacity have been reached; and such a state, where increased expenditure is effective chiefly in driving prices upward, may be called a state of "inflation." Such a condition may exist in a period of violent social and economic upheaval, when the state and the bankers are creating new money at

¹The Preamble of the Bank of Canada Act.

an unjustifiable rate; it may also exist, in a measure, towards the peak of a period of prosperity, when unemployment has sunk to a low level. Real income may actually be diminished by the violent, uncertain, and unequal increase of prices. It is also possible, under other conditions, that real income may be increased by policies involving an initial reduction of money income. For example, in a period when the prices received abroad for the products of some groups (e.g., farmers) have been falling much more rapidly than the prices received in the home market by others (e.g., manufacturers), a policy (e.g., tariff reduction) which leads the latter to quote lower prices may in certain circumstances lead them to sell a larger volume of goods; so that, while the average prices and total money income received by the whole community may fall, its real income may at the same time rise. But apart from special instances such as these, we may feel fairly safe in expecting that when money income is changing fairly rapidly it will be associated with changes of real income in the same direction. Throughout the remainder of this chapter and the next we shall deal with money income only, assuming that real income moves in the same direction.

When we consider how the volume of money income changes, confusion sometimes arises over the hen-and-egg nature of income and expenditure. Does changed income cause changed expenditure or *vice versa*? For our purposes it is sometimes useful to adopt one point of view, sometimes the other. This is partly because some types of expenditure are much more variable, much more independent of current income, than others. Expenditures on consumable goods vary relatively little. They are usually made out of income without much recourse to borrowing or other financing. They move more or less passively as people's incomes change, in the same direction although probably in smaller proportion. On the other hand, expenditures on durable goods and equipment vary much more widely. Alterations in investment in durable goods and equipment produced locally are usually considered to be amongst the more important sources of alterations in the general level of income. Thus when considering changes originating within a country, it is desirable to give causal pre-eminence to expenditures of an investment type. The general volume of incomes may be regarded as changing as a result of such expenditures.

When we turn to consider changes originating outside a country,

particularly changes in the value received for exports, it is the volume of incomes that deserves causal pre-eminence. Exporting groups will alter their expenditure upon consumable goods as a result of their changed incomes; and alterations in their outlays for investment purposes may be induced by their changed situation and prospects.

When people receive their money incomes they may employ them in any one of three ways: (i) they may spend them abroad to import goods and financial claims, (ii) they may spend them at home on services and goods of all sorts produced locally, (iii) they may accumulate financial claims to wealth and income at home.² By financial claims we mean all such things as securities, bank deposits, etc. The way in which people in general and exporters in particular dispose of additions to their incomes, and the manner in which they economize when their incomes diminish, are important factors in determining the ultimate effect of an initial change in the level of incomes in the Dominions. If most of an increase of incomes is spent upon the purchase of goods produced within the country it will induce re-employment and a further increase in incomes; if spent upon imports its effect will be upon the foreign exchange situation rather than employment. Such possibilities as these we must consider in some detail.

²For those who wish to consider these three divisions in greater detail a few words may be added. (i) This category really covers all items on the debit side of the current balance of international payments together with the net outward movement on capital account. In the long run it makes a vast difference whether a country has been importing securities or machines or fertilizers or consumables of one sort or another; but in regard to the immediate processes of expansion and contraction of money incomes there will be no difference and even over short periods of a year or two the difference is not likely to be very great. (ii) In the arguments which follow it is assumed that expenditure on goods which have been produced locally results generally in current production of similar goods, and not merely in a depletion of stocks. However, the possibility of depletion of stocks is not ignored, and is treated under the title of "induced disinvestment." (iii) The financial claim which is one person's asset is another's liability. Thus additions to the volume of financial claims on local wealth or income cannot be included in an estimate of the community's additions to wealth. On the other hand, such an estimate would have to include the net import of financial claims from other countries and also the additions to durable goods resulting from home production and imports.

(2) EXPENDITURE ON IMPORTS*

Marginal Propensity to Import. The extent to which a community devotes any addition to its existing incomes to the purchase of goods from abroad has been called by Mr. Paish the "marginal propensity to import."⁴ He suggests that in countries such as the Dominions this propensity is high. In any country where the per capita trade is large in proportion to the per capita production this is likely to be true; to take the extreme case of the imaginary colony sketched in the last chapter, *all* increased incomes would be spent on imports for the very good reason that there was nothing produced locally to spend them on. The high per capita trade of the Dominions thus makes probable a fairly high marginal propensity to import. But another cause contributes to the high marginal propensity. Their imports are, in considerable degree, high grade manufactures and luxury articles: just the sort of things which will be more in demand if incomes rise and will be dispensed with if incomes fall. Moreover, machinery and capital goods rank high amongst their imports, and these will be in demand chiefly when incomes are rising. Lastly, services as well as goods must be paid for abroad. Payments for services are likely to be greater with greater incomes, whether the payments are in the form of tourist and freight expenditures or in the form of interest and dividend payments for the services of capital imported in the past.

As well as importing and exporting goods and services a country may import and export financial claims. It is convenient at this point to include a net import of claims amongst a country's imports; and similarly a net export of claims may be considered as a deduction from expenditure on imports. This is reasonable enough because, to take an extreme case, a country which is borrowing abroad enough to cover all its imports may properly be considered to be spending nothing on those imports. If this procedure is adopted we have another factor making for a high marginal propensity to import. A

*The greater part of the material in this section and the two following ones has already appeared in the *Canadian Journal of Economics and Political Science*, vol. V, Aug., 1939. It is reproduced here by kind permission of the editors.

⁴F. W. Paish, "Banking Policy and the Balance of International Payments" (*Economica*, new series, vol. III, 1936, pp. 404-11). Using alternative terminology, introduced to economists by Messrs. Hicks and Allen, we might speak of the "income-elasticity" of imported goods in general.

country's net acquisitions of claims from abroad will tend to fluctuate with general movements of income within the country; at any rate in periods when international lending is playing a passive rather than an active role in the balance of payments.

If changes of incomes are chiefly generated by the fluctuating values of exports, a high marginal propensity to import will be a factor eliminating difficulties in the exchange market. In the terminology of the last chapter, changes in the spontaneous factor of exports (A payments) will be largely offset by changes in the associated factor of imports (B payments) so that little further mechanism of international adjustment need be set in motion. It is worth while considering, however, the possibility that there may be some lag between the receipt and expenditure of changed incomes (D items may exist temporarily) and in that case some adjusting items (C) must span the gap. Actually, it is not probable that this lag will be a long one—more than a month or so. An exception might be made in the case of relatively wealthy individuals. They can afford to spend more or less what they please when they please, and they may only gradually readjust their spending habits to their altered incomes. The same is true of large corporations and businesses.⁵ Such a lag, however, while it postpones the natural tendency towards equilibrium on the exchange market, is not likely to be of great significance; and we may conclude that countries with high propensities to import are not likely to experience sharp difficulties in their exchanges in the face of varying incomes from exports.

If, however, changes of incomes are chiefly generated within the country, then the situation is just the reverse. A high propensity

⁵The lag here discussed is merely the period between changed incomes and changed expenditures. It must not be confused with the lag which exists between changed incomes and the full effects of changed outlays including all their repercussions. The latter is discussed below.

It must be added that the concept of income is not clear or unambiguous, especially in relation to wealthy individuals, entrepreneurs, and corporations. Arbitrary or conventional allowances have to be made for capital appreciation or depreciation, obsolescence, and so forth. Into this whole matter we cannot enter here. A helpful discussion may be found in J. R. Hicks, *Value and Capital* (Oxford, 1939), chap. xiv. It will be clear, however, that we are referring only to the "final" incomes received. The income of the retailer, for instance, is not the aggregate which he receives from his sales, but only what is left over after paying for his supplies and for his employees and after making such other payments and allowances as his use of land and capital equipment entail.

to import will mean that these changes of incomes will immediately exert a strong influence on the demand side of the exchange market without altering the supply. If the Government or private employers increase their outlays, new incomes are set in motion which increase imports without providing any addition to the supplies of foreign exchange with which to buy them. An erstwhile colony where a considerable degree of industrial and financial complexity has developed and where, despite this development, the marginal propensity to import is still high, is the type most likely to experience exchange difficulties as a result of spontaneous (internal) changes of incomes. A situation of this sort probably exists in the Dominions. It is an important obstacle (as Chapter XVI will show) to the success of various controls which the authorities might otherwise impose upon cyclical fluctuations of business and prosperity while still retaining the traditional stability of the foreign exchange rate.

(3) EXPENDITURE ON GOODS PRODUCED LOCALLY

Internal Repercussions. The money that one individual spends on local goods and services goes to another individual as his income, either directly or possibly after several intermediary changes of hands. The second individual will also spend a part of this increased income on domestic products; and so on, each spending *a part* of what he gets in the same manner. The result is that the total incomes of the community will be increased not only by an original infusion but also by the repercussions which follow.

It is possible to make some estimate of the extent of the repercussions. Mr. D. C. MacGregor has published some figures suggesting that a roughly predictable relationship existed between total exports and total national income in Canada. His survey of the period 1921-34 seemed to support the statement that "an annual change in the value of exports of say \$100 millions, will probably be accompanied by, or followed by, a movement of national income in the same direction, which is not likely to be less than \$200 millions nor more than \$450 millions."⁶ Included amongst the repercussions in this estimate were not only those directly involved by the passage of money from one income-recipient to another but also the whole

⁶*Monthly Review of the Bank of Nova Scotia*, Dec., 1935; see also Nov., 1935, and May, 1937.

of the optimistic stimulus throughout the economy to spend freely, to live well, and—more important—to extend capital equipment and engage in new enterprise. The assumption that such things were basically attributable to the export situation was by no means unjustified in Canada during that period. Indeed, a survey of the way in which movements in the construction industry were related to those in the national income suggested that "construction first tends to lag behind and then, as confidence is renewed and recovery gathers momentum, to lead the way. . . . In Canada, such a state of affairs is ultimately dependent upon an expanding export income."⁷

Marginal Propensity to Consume and the Multiplier. It is possible to make more detailed and perhaps more precise estimates of the relation between spontaneous changes of incomes or outlays and the resulting changes of total incomes. Following Professor Giblin and others, Mr. Colin Clark in Australia has approached the matter deductively⁸ (in contrast to Mr. MacGregor's induction of the relation from the figures for export and total incomes). He suggests that if people normally spend a certain proportion of increased incomes upon home-produced consumption goods⁹ it should be possible to compute from this the proportionate effect on total income of an increased rate of infusion. For instance, if people normally spent one-half their incomes on home-produced consumption goods, the series of incomes directly set on foot by an increased rate of infusion of 1 unit would be (if we include the initial increase):

$$1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} \dots \dots \dots$$

each fraction being half the preceding one. The sum of all these additions to income, as they proceed indefinitely, approaches 2.

⁷*Ibid.*, Sept., 1936.

⁸See L. F. Giblin, *Australia, 1930, an Inaugural Lecture* (Melbourne, 1930), pp. 10-12; also Colin Clark, "Determination of the Multiplier from National Income Statistics" (*Economic Journal*, vol. XLVIII, Sept., 1938, pp. 435 *et seq.*); and especially Colin Clark and J. G. Crawford, *The National Income of Australia* (Sydney, 1938), chap. xi.

⁹In the two previous paragraphs we were considering, amongst the repercussions of changed incomes, changed expenditures of all sorts, whether on capital or consumable goods. Here, it will be noted, only the changed expenditures on consumable goods are considered as repercussions; while all changes in expenditures on new capital goods are considered as independent or originating disturbances.

Thus, Mr. Clark would say, that the "multiplier" which relates the additional infusion to the increase in total income would in this case be 2. Using Australian data on the disposal of incomes he calculated that the "multiplier" in that country was 2.08.

Mr. Clark claimed that, using this multiplier, it was possible to predict accurately the movements of total income which accompanied the movements of the infusing or independent factors—determinants as he called them. These determinants were not merely exports but in addition budgetary deficits, expenditures upon capital goods and investment of all sorts, and "autonomous" reductions in imports caused by increased tariffs, etc. All these were alike in that "they generate income without increasing the supply of consumption goods and . . . may be regarded as original stimuli whose effects will be 'multiplied' according to the multiplier relationship."¹⁰

Difficulties in Applying the Multiplier. From the point of view of a central bank, interested in the regulation of both exchange rates and local incomes, the existence and investigation of such relationships as these are of importance. Yet a warning note must be sounded because the matter is less tractable than it appears. First, economic statistics are subject to various degrees of unreliability. Second, human beings are so human that statistical records of their behaviour in the past are not entirely reliable indications of how they will behave in the future. Third, there is the troublesome but important matter of lags to be considered. Fourth, the multiplier applicable to some infusions of income is not applicable to others in the same country or even at the same time.

Regarding the matter of lags, it is probably less important to emphasize and clarify the subject in regard to the Dominions than it is elsewhere. Because agriculture plays so important a role in all their economies, the only reasonable unit of time in the consideration of income is one year—not the calendar-year but the crop-year. Most of the change of total incomes attributable to an initial change in the rate of infusion will occur *in the same year*. In general, the first expenditure out of an increased infusion takes place very quickly, within a week or so at most; and in the case of agricultural

¹⁰Clark, "Determination of the Multiplier," p. 438. One would have expected a change in the tariff to have been treated as a change in the propensities to import and to consume rather than as a change in the determinants.

incomes and some others much of what may reasonably be so regarded will actually be spent in advance of its receipt, thanks to the extension of seasonal credit by banks and other institutions. Thus, as long as the unit of time is not less than twelve months and corresponds to the seasonal activity of agriculture, the proportion of total income-increase in any period which is logically attributable to an initial increase of the determinants in *previous* periods will be small and probably negligible. Attempts to use shorter periods, however, are liable to the problem of the lag.¹¹

Next consider how the outcome will be affected by the point at which the increased infusion takes place. The point of infusion is important for two reasons: first, the propensity to consume is different in different sections of the community, and second, a given autonomous infusion may induce other dependent infusions or may restrain other infusions from taking place.

The propensity to consume is different in different industries.

¹¹Mr. Clark was not the first to leave his readers somewhat uncertain whether the multiplier was a figure which related a given additional infusion (*a*) to the total increase of incomes to which the addition gave rise immediately and subsequently, or (*b*) to the increase in the volume of incomes which existed during the period occupied by the infusion. Mr. Keynes, who is chiefly responsible for popularizing the concept, left many of his readers in the same quandary by his exposition in *The General Theory of Employment, Interest and Money* (New York, 1936). See pages 113-15 where the multiplier first appears to be the sum of an infinite series and causal connections are under discussion; then compare this with pages 122-4 and 403 where these causal connections seem to be rejected and the multiplier is moulded to fit whatever events do in fact occur simultaneously. Mr. Keynes has, I think, defended the logic if not the utility of his latter position; for he makes it quite clear that in a period when an increased infusion is taking place the multiplier which relates this increase to the contemporary increase of total income will, in the absence of adequate activity based upon accurate foresight, be distorted by two factors: first, the (net) additional infusion may not really be of the magnitude which appears at first sight (because of the "induced" investment or disinvestment which is described below), and second, the marginal propensity to consume and thus the multiplier may temporarily diverge widely from its normal position. Mr. Clark lumps all the possible "determinants" together without attempting to ascribe causal superiority to (say) exports and causal inferiority to (say) budgetary deficits or even to changes in working capital. Formally, therefore, his computations may be correct; but in his hands the theory of the multiplier remains, more clearly than ever, simply descriptive of concurrent conditions. It throws no light upon the processes of change for it contains no logic of cause and effect. Whether large incomes cause large investment or *vice versa* lies beyond its purview.

In those that are highly capitalized (where much of the income goes to capitalists) a high proportion of income will be devoted to the accumulation of securities and other claims; in those that depend largely upon imported raw materials or have depended on imported capital there will be a high propensity to import;¹² and in both cases the propensity to consume is likely to be so much the less. Thus the computation of a normal propensity to consume and a normal multiplier for the whole community does not provide a reliable guide to the result of increased investment or exports.¹³ A striking instance may be found in Newfoundland, where there are very few important exports. The most valuable exports nowadays are minerals, newsprint, and pulp; but a change in the value of these only alters incomes and employment in a few isolated towns of a few thousand people, and otherwise affects chiefly the incomes of a large capitalist group *outside* the country. The export of fish is only one-third as valuable as those already mentioned; but the whole economy has been built up around this industry which is conducted by small scale enterprise. A change in the value of this export influences the prosperity of the whole country.

Next we must consider that a given autonomous infusion may either induce dependent infusions or else restrain other infusions from taking place. If there is a rise of export values, or if there is an increase of long term investment in some industry, the new incomes and spending which are set in motion will almost certainly evoke, perhaps after some lapse of time, an increased investment in

¹²The need for foreign exchange to finance debt service or dividend payments to foreign countries is, it will be recalled, included amongst the factors contributing to the propensity to import. In short periods interest payments are not likely to alter much unless default is involved.

If we use our terminology strictly, "industries" do not receive "income" (apart from undistributed corporate profits). Thus if a Government undertakes construction projects, and these involve imported raw materials, our present terminology cannot take account of the imports (because they are not associated with any final income). In general, however, our terminology suffices.

¹³The first distribution of increased incomes may differ very markedly from the average. As the money passes on from the first income recipient to the second and third and so forth, it becomes diffused throughout a variety of industries and its redistribution, at each step, will more nearly conform to the average. However, if the normal propensity to consume home products is about $\frac{1}{2}$ (as seems probable) each item in the series $(1, \frac{1}{2}, \frac{1}{3}, \dots)$ is equal to the sum of all that follow; so that the first distribution is of great importance.

circulating or working capital by retailers and manufacturers of consumable goods. Here is a factor which we may call induced or dependent investment. Nor will the induced investment necessarily stop short with the extension of inventories and working capital. If the tributary industries are working near the limit of their capacity they may also begin to invest in fixed equipment. On the other hand, there may be induced disinvestment. Under certain circumstances retailers and others may be only too glad to allow their stocks to run down, for a time at least, in the face of increased demand. In such a case the induced disinvestment would have to be subtracted from the original increase of investment or export incomes before applying the multiplier. When there is induced investment it would have to be added. Strictly interpreted, the multiplier relationship is a formal mathematical one between total infusions, autonomous and induced, and total incomes; it does not tell us what the outcome of an autonomous infusion by itself will be.

To illustrate the matter we may take the case of Canada in the nineteen-twenties and later in the nineteen-thirties. The earlier period's prosperity was founded in large measure upon the expansion of wheat exports. The repercussions were widespread, partly because wheat producers probably had a high marginal propensity to spend on consumption goods which, due to the tariff, were produced in Canada; and partly because the wheat industry required a great deal of induced investment in farm equipment, harbours, elevators, transport facilities, and the like. In the latter period revival was led by gold mining; but prosperity was much more confined, less universal. The national income failed to multiply on the basis of increased exports and fell away, almost without lag, when exports declined. This was partly because the marginal propensity to spend of those collectively engaged in mineral production was relatively low (the propensity to accumulate titles to wealth and to import such things as machinery probably being greater than in the case of wheat); it was also because mining, taken together with auxiliary industries, probably induced far less new capital investment per dollar's worth of export-expansion than wheat. Another industry which contributed to the different behaviour of the economy in the two periods was pulp and paper. In both periods there was a great expansion of the value of exports. In the former period this induced investment in a large number of new plants; in the latter it

largely re-employed plant and machinery which had become idle. A further factor which minimized the response of the economy to increased exports in the nineteen-thirties involved the principle of induced disinvestment. In the early part of 1936 there were large exports of wheat; but these were from stocks accumulated by the Government in an attempt to maintain prices in earlier years, and the proceeds simply went to discharge bank loans.¹⁴

We may conclude that the principle introduced by the multiplier is a very useful one in describing and analysing economic processes. But it has its dangers. Allowance must be made for lags if fairly long periods of time are not used. Moreover, a multiplier cannot be applied without regard to the disposition of incomes by the people in industries immediately affected, and without regard to the investment or disinvestment which an autonomous change may induce.

(4) FINANCING AND THE LOCAL CAPITAL MARKET

Variations of Income Permitted by the Local Capital Market. A highly developed, highly complex system of finance will be an important factor in permitting expansions and contractions of a community's income. When incomes are expanding, a very important source of the expansion is likely to be found in funds raised from the financial institutions and the capital market. Whence does the newly raised money come? It comes, in the first instance, out of the supplies or reserves of money held by financial institutions, businesses, and individuals dealing on the capital market. Thus, at any given moment, the willingness or unwillingness of these groups to lend, to part with money, is decisive in determining how much shall

¹⁴Of course there were many other factors at work to produce the different behaviour of the economy in the two periods. Part of the construction activity in the earlier period must be attributed to the deficiencies caused in the previous decade by the War; also to a rapid trend towards urbanization. See, however, D. C. MacGregor, *Memorandum 64 of the London and Cambridge Economic Service*, Feb., 1937, p. 23; also "The Role of Mining in Canadian Business" (*Monthly Review of the Bank of Nova Scotia*, July, 1936; also W. J. Hasler, "The Boom and Depression in Canada, 1924-1935" (thesis submitted for the degree of M.Sc. (Econ.), University of London, May, 1936), chap. vi, especially the section which explains why the economy reacts far more spectacularly to changes in wheat exports than to pulp and paper exports; also the *Annual Report of the Governor of the Bank of Canada, 1939*, and his evidence to the House of Commons Committee on Banking and Commerce, 1939, pp. 560-2.

be secured for investment and for other expansive purposes. Much was said in Chapter VIII regarding the factors influencing the attitudes of financial groups towards parting with their funds, special attention being given to the role of current interest rates in this respect.

The liberality of these financial groups will naturally be influenced by the way in which their supplies or reserves of money are being depleted or replenished. In this regard it is important to recognize that an increase in liberality may be largely supported by its own results. Increased expenditure upon investment is likely to produce, perhaps after some lag, an increase in the total stream of incomes which may be roughly twice as large as itself; and out of this additional stream of incomes a certain amount will be devoted by its recipients to accumulating titles to wealth of all sorts. Except in so far as they accumulate money (including bank deposits) their accumulations will be made available to the financial groups. Conversely, if the rate of money-raising and investment falls, the effects on the financial groups will probably include not only the diminution in the demand for funds but also the reduction at an early date of the supply of funds seeking outlet through the financial system. The demand for funds is likely to be highly variable, depending upon good and bad times at home and abroad and upon changing estimates of the future; and the supply of funds which current accumulation *can* provide varies roughly with it although usually with some lag. Whether funds, accumulated currently or in the past, *are* actually made available for speculative or investment purposes must depend upon the attitudes and expectations of the groups concerned, which will be partially reflected in the current level of interest rates and security prices.

Checks on Expansion: Legal, Conventional, Economic. The elasticity of the capital market depends ultimately upon the elasticity of the monetary system. Custom, law, and financial prudence impose limits upon the issue of currency and the extension of bank credit and also upon the behaviour of other financial institutions. The higher the rate of money-raising and the greater the volume of money incomes, the greater will be the volume of money of all sorts which, at any given moment, will be outside the capital market and financial institutions and for the most part unavailable to them.¹⁵

¹⁵The generally acceptable custom of including bank deposits subject to cheque

The more highly developed the market the greater are likely to be its expansive and absorptive powers. To banks and other financial institutions cash is simply the most liquid, the most readily available, of a variety of liquid assets. The broader the market the greater the reliance which (individually) they will be able to repose in treasury bills, government securities, etc., as means of meeting obligations in emergency. Cash will be less significant because of the more abundant alternative sources of liquidity. The establishment of a central bank is a factor contributing to the liquidity of certain approved assets, and thus a factor relaxing the restrictions upon expansion. On the other hand, a contrary tendency is also at work as a market gradually grows and develops. It is possible for banks and other financial institutions operating in a well-developed market to adopt fairly fixed habits in regard to cash reserve proportions. This is practically impossible in an undeveloped market. Thus the banks alone, in a country where there is an undeveloped market and little other financial machinery, might possibly supply a greater degree of credit elasticity than those which, more favourably situated, had been able to develop fixed habits. However, taking the whole financial situation into consideration, it seems probable that as a market develops in breadth and complexity its willingness and ability to support expansions and absorb contractions in the community's income on balance increase.

For some purposes, and particularly in relation to the processes of long run growth and development, it is important to inquire into the factors which limit the amount of financing of investment that a country can undertake without the assistance of new money supplies from either local or foreign sources. (Up to this point we have been concerned with movements of total incomes and outlays; but here attention is focussed upon outlays for investment purposes

under the heading of money may cause the reader some confusion here. These bank deposits are regarded as money by the depositors; but the banks themselves regard only their cash reserves as money. (Deposits are, of course, their liabilities; and by no means "money" from their viewpoint.) When we say that the amount of money available to the financial institutions tends to diminish in good times, we mean both that bank reserves tend to be diminished by the enlarged circulation of legal tender notes and coin and also that, of the existing volume of deposits, more is in the hands of consumers and producers of all sorts for the purpose of financing current turnover of goods and services and thus less is available for outlet to or through financial institutions other than the banks.

alone and particularly upon such of these outlays as are financed from the local capital market and financial institutions.) The extent to which expanded financing of investment can take place without recourse to capital imports or to the creation of new money will depend upon the community's marginal propensity to accumulate "securities," that is, to accumulate all sorts of local titles to wealth other than money. At first sight this seems a truism—that financing can be accomplished in so far as people are willing to place funds at the disposal of financial institutions and the capital market. But, as is often the case, it is interesting to trace the implications of this truism.

In tracing the implications it is necessary to remember that a high marginal propensity to accumulate securities must involve any or all of three things: a low marginal propensity to accumulate money, or to spend on home products, or to import. Let us see how the existence of each of these conditions would facilitate local financing of investment. First, the importance at any given time of the decision not to hold on to or accumulate money has already been mentioned. The funds, which people are willing to put at the disposal of money-raisers, may be accruing as their current incomes or may have accumulated in the past; in any case, the decision not to hold, not to keep liquid, will be reflected in raised security prices, low interest rates, and easy money generally. This, as Chapter VIII showed, is likely to facilitate investment. Second, how will a low propensity to consume facilitate locally-financed investment? This comes about because the low propensity to consume results in a low multiplier. Thus the general expansion of business and incomes as a result of increased investment will be low; and the amount of money kept outside the capital market and unavailable to it will be low. (It must be re-emphasized that our present interest is merely in how the volume of locally-financed investment may be maintained, without regard to the resulting volume of total incomes.) In other words, the low propensity to consume, like the low propensity to hold money, will promote easy conditions in the capital market and thus facilitate investment. Third, what of a low propensity to import? In this case the resulting easiness may be said to arise in the foreign exchange market rather than the capital market; although under the traditional policy of the Dominions (stable exchange rates) a shortage of foreign exchange produces financial

stringency.¹⁶ A low propensity to import relieves difficulties which would otherwise emerge in the exchange market as a result of expanding internal investment and incomes. If the expansion was financed by borrowing abroad, the stringency in the exchange market would be averted by additional supplies of foreign exchange; but it would arise if the expansion was financed locally. In short a high marginal propensity to accumulate securities makes possible, by one or more of three paths, a large amount of local financing; and this is so because restrictive factors are avoided in the local capital market or the foreign exchange market or both.

From the point of view of public policy, the avoidance of increased borrowings from abroad may be desirable; and in so far as local accumulation of securities serves this end it may be useful. If, however, it merely obviates the necessity for easing the financial situation by the creation of new money, that—in this day and age of "intelligent monetary management"—is not necessarily a great virtue. And we must not forget that accumulating titles to wealth has its seamy side; for, in the absence of an adequate incentive to issue titles, to raise funds and invest them, the propensity to accumulate titles may simply produce a state of chronic under-consumption and depression.

Incentives to Expansion. The incentives to expand, to speculate, to invest, and to raise funds for these and associated purposes, are complex. They lie partly in a vague adoration of expansion as an aspect of progress, partly in a belief that expansion is the hallmark of success (a belief which may prove premature), and partly, as some economists may have over-emphasized, in the hope or the expectation of profits. We have already seen, in Chapter VIII, how uncertain and volatile these expectations must be when, in countries like the Dominions, the exploitation of virgin resources is under consideration. This is one way in which the incentives to invest and to raise money in the Dominions have differed somewhat from those in older countries.

¹⁶The argument here has become sufficiently long and complicated. Another set of arguments might be produced on the assumption of some alternative foreign exchange policy: e.g., one which permitted the foreign exchange rate to adapt itself freely to international commodity trade. Further assumptions might be made regarding what international capital movements might result from a given movement of the exchange. But we cannot pursue these abstractions here.

Another special consideration arises regarding the incentives to invest in countries which, like the Dominions, are largely committed to international trade and largely dependent upon exports. In such countries the incentive to invest may depend more upon the level of incomes and the trend of demand abroad than upon similar matters at home. Here, incidentally, is a reason why a low marginal propensity to consume and a low multiplier, which might otherwise involve chronically low incomes and a low local incentive to invest, is less to be feared than in countries which are more nearly self-sufficient.

But the difference of incentives, on these and other accounts, is diminishing. As a country emerges from economic colonialism, as a measure of independence and self-sufficiency arises, as local manufacture and local finance develop side by side, and as the export market ceases to dominate economic life, the factors change which lead business men and Governments to raise money and expand operations. More attention is paid to local events and less to foreign ones; more to the demands of the home market and less to the behaviour of buyers and creditors abroad. The decline of the propensity to import is accompanied by the rise of the propensity to purchase local products; the multiplier increases. If a new infusion of incomes takes place the consequent aggregate response is larger; and the resulting change of business opinion will also, probably, be larger, inducing greater local financing and greater expansion than would otherwise occur. In such ways does independence of mind, motive, and movement accompany the growing independence of the body economic.

(5) CONCLUSION TO CHAPTERS XIV AND XV

General Considerations. We may now pull together the various threads of this chapter and the preceding one. The monetary systems of the Dominions, like their banking systems, have now achieved a considerable measure of independence. These young countries have now "exchange rates" which have been subject to considerable variations, and they have exchange problems. The problems arise out of the stage of development which the economies have reached. Their growing complexity, their diminishing dependence upon foreign markets as the dominant source of their incomes, the increased proportion of their employment and pro-

duction devoted to home consumption, and their large foreign debt,—all these are fundamental to their exchange difficulties.

The exchange difficulties may be explained in terms of the lags in their demands for foreign exchange behind supplies, and also in terms of autonomous movements of incomes within the countries. The most obvious cause of a lag is the existence of foreign indebtedness, for this constitutes an immobile source of demand until default is induced. But in addition even those demands which are not immobile do not always move very rapidly in such a way as to offset changes in the supplies of exchange. These lags, which produce difficulties when incomes from exports are falling, arise from three sources. First, even those people who, upon receipt of decreased incomes from exports, will eventually reduce their expenditure on imports, may not do so immediately. Rich people and corporations are not forced to change their spending habits immediately in conformity with changed incomes. Second, in any moderately short period of time (a year or less), some of the purchases of imports being made may be attributable to the flow of incomes set in motion by exports of a higher level in the immediately preceding periods. In a contractive as well as in an expansive direction, the repercussions of changes take some time to work themselves out. Third, the contraction of incomes directly set on foot by diminished exports will subsequently cause some disinvestment of working capital and, if it appears likely to continue, a restriction of activity in the capital goods and construction industries. According to some rough multiplier relationship these reductions of investment, like changes in export incomes, will later produce a further fall in the aggregate level of incomes and the demand for imports. Thus as a result of these three factors, there is only a gradual change of imports consequent upon a change of exports.

The response of a community's total income to changes in the rate at which income-infusions are occurring from exports, investment, etc., will depend upon the way in which the community distributes its outlays. New incomes may be devoted largely to the purchase of imports, in which case the response of imports to the infusion will be large and quick but the internal repercussions and the aggregate growth of income relatively small. Alternatively new incomes may be devoted largely to the purchase of home products, in which case the response of local incomes will be large but

the response of imports may be relatively tardy because the increase of incomes and thus of imports may take some time to materialize.

The response of the community's total income to increased or decreased rates of infusion will also depend in part upon the point at which the infusion takes place. The response to investment at home may be appreciably different from the response to exports. One export, one field of investment, may differ from another in its repercussions, depending partly upon the special propensities of the first recipients of the increased incomes and partly upon the extent to which these initially expanding industries require capital investment, directly or indirectly, as they expand.

Finally, a sketch of the activities of the capital market, and the flows of money to and from it, was needed in order to complete our picture of the processes of expansion and contraction. To some extent the expansive powers of a capital market depend upon legal and customary limitations. In addition, however, they depend upon the degree of development and complexity exhibited by the market and—which is perhaps another aspect of the same thing—the extent to which the local community is willing to accumulate income and place it at the disposal of the capital market. These are the factors limiting elasticity. But what are the factors which periodically cause the elastic to stretch? What are the incentives to expansion? In the Dominions these incentives have exhibited certain peculiarities: they have depended upon less certain, less predictable factors than in more mature countries, and they have depended less upon the state of business at home and more upon the state of business abroad. However, the financial and economic structures of the Dominions have matured rapidly in recent years, so that these peculiarities have been diminishing.

Pure Theory of Adjustments. Some readers may find it of interest to draw our conclusions together, not only in the form of the foregoing generalizations, but also in a more precise, mathematical manner. It is therefore worth while to inquire, in the realm of pure theory, how an economic system might settle down, both in its internal and international relationships, after the rate of infusion of incomes had increased. (The case of decreased incomes may be deduced, *mutatis mutandis*.) In order to do this let us for the moment simplify our picture even more than has already been necessary in outlining the theory of the multiplier. Let us suppose

that nobody ever buys capital goods out of income, but always relies on raising the necessary funds from the local capital market; and that nobody ever raises funds except for the purpose of investing in capital extensions. This means that, from the point of view of the disposal of incomes, all accumulations take the form of increased holdings of financial claims; and, on the other hand, the increase of financial claims exactly equals the volume of new investment.

Under these highly simplified conditions it is possible to trace clearly the way in which the local situation and balance of international payments will alter as a result of the infusion of new incomes. Let us suppose that there is an increased rate of exports of £x per month, and that:

$$\begin{array}{lcl}
 \text{marginal propensity to import}^{17} & = \frac{3}{8}, \\
 \text{marginal propensity to consume home products} & = \frac{1}{2}, \\
 \text{marginal propensity to accumulate} & = \frac{1}{8}, \\
 \hline
 \text{all of which must add up to} & & = 1.^{18}
 \end{array}$$

As for the domestic situation, we have already shown that, with a marginal propensity to consume of $\frac{1}{2}$, the multiplier turns out to be 2. That is, if x is the increased infusion of incomes we have:

¹⁷At this point it is convenient to include only the current debit items in the balance of payments under this title. We thus exclude the net movement of capital which we shall find reappearing under the title of accumulations.

¹⁸Clark and Crawford (*The National Income of Australia*, p. 100) compute these three fractions to be 0.25, 0.52, and 0.23 for Australia between 1931 and 1937. They computed the marginal propensity to save for the State of Queensland from available statistics and applied it to the Commonwealth as a whole; the marginal propensity to import they computed from the import and national income figures for the whole country; the marginal propensity to consume was then assumed to be such as to make the sum of the fractions unity; and from the marginal propensity to consume the multiplier (2.08) was calculated.

These figures imply that the marginal propensities were constant for the various volumes of income included in the period. The national income, according to Clark and Crawford, rose from £A 528 millions in 1931-2 to £A 814 millions in 1937-8. Other figures in their book provide some basis for the assumption that, no matter what the pre-existing level of income, 0.25 of any increase would be devoted to imports (including imports designed to expand both consumption and capital equipment). But it is difficult to feel confident that the same constancy attaches to the proportions of increased income which would be saved and consumed. One would expect that the community could afford a good deal higher rate of saving at the high income than at the low.

$$\text{total increased incomes} = 2x \text{ per month},$$

and from the fact that $\frac{1}{2}$ of any increase is devoted to consumables produced at home, and $\frac{1}{8}$ to accumulation, we have:

$$\begin{aligned} \text{increased consumption of domestic} \\ \text{products} &= 2x \times \frac{1}{2} = x \text{ per month}, \end{aligned}$$

$$\text{increased accumulation} = 2x \times \frac{1}{8} = \frac{1}{4}x \text{ per month}.$$

Turning now to the international situation we may deduce that:

$$\text{increased imports} = 2x \times \frac{3}{8} = \frac{3}{4}x \text{ per month}.$$

But this leaves a monthly surplus of foreign exchange of $\frac{1}{4}x$; for exports have increased by x and imports only by $\frac{3}{4}x$. This surplus arises on account of the accumulation going on in the community; and (since the expansion of incomes is arising entirely out of increased exports and not at all from the increase of local investment and the issue of financial claims on the domestic market) the accumulation of claims must be in the form of claims on foreign countries. In order to fill the gap in the balance of payments we have:

$$\text{increased accumulation of claims abroad} = \frac{1}{4}x \text{ per month}.$$

What forms may these increased claims abroad take? It is easiest (although it offends against our supposition that local financing takes place for no purpose but local investment) to conceive of this community's new accumulations consisting of deposits ($\frac{1}{4}x$) in the local banks, and the banks holding as assets against these new liabilities the accumulation of foreign exchange ($\frac{1}{4}x$). It is indeed probable in the real world that some of the accumulations arising out of increased incomes would be willingly held as increased deposits, for increased bank deposits (both savings and current) are usually desired in conjunction with rising incomes; but it is not necessary that the whole amount should be so held by the various recipients. In a measure these savings would seek outlet in the local capital market, driving prices up and yields down. This might simply result, in the real world, in a more complex structure of debits and credits between the individuals and institutions within the country: for example, if the savers preferred life insurance to bank deposits they would transfer their deposits to insurance companies in exchange for policies. It might also result in some transformation of the capital exports which originated as the increase in the foreign assets of the banks; for raised prices of local securities

might cause some purchasing of securities from abroad, and this would carry off some of the foreign assets of the banks.

A change in the value of exports is not the only source from which alteration in the rate of income-infusion can arise. Another source is a change of local investment. Changes of exports and of local investment often go together; indeed a rise of incomes is practically sure to incur some investment in increased inventories and may well induce some investment in equipment. A further rise of incomes will occur on the basis of a rise in investment. This further rise of incomes and imports might normally be expected to carry off some at least of the accumulations of foreign exchange which (as the last paragraph suggested) might result from increased incomes due solely to exports.

CHAPTER XVI

CYCLICAL MOVEMENTS WITH FIXED EXCHANGES

(1) NATURE OF THE MOVEMENTS

THE cyclical movements of business in the Dominions have much in common with similar movements in more highly developed capitalist countries: the tendency to expand capital equipment and working capital, the increase of employment, money incomes, and purchasing power, the rise of prices and production, the spread of optimism, the excesses of speculation and of capital extensions, the spread of mistrust and the fall of speculative prices, the abandonment of ambitious projects, the decline of wages, incomes, and purchasing power, the spread of unemployment, the lack of confidence in the immediate future, and the period of depressed inactivity. All this and much more is common enough to students of the business cycle.

* *Peculiarities of the Movements in the Dominions.*¹ Some features of cyclical movements in the Dominions present special problems to the central bankers and others who attempt to control the situation. Most important is the fact that the Dominions' economies have been built up for the primary purpose of exporting raw products, and that changes in the values of exports of these products constitute basic alterations in their economic conditions. Despite the spread of secondary industries, and the countries' growing self-sufficiency, changes in export incomes are still the independent

¹Literature concerning the financial aspects of cyclical movements in the Dominions is rather scattered. For students who wish to pursue the matter a little farther than is possible here the following bibliography may be helpful.

AUSTRALIA: Roland Wilson, "Economic Cycles in Australia and New Zealand" (*Economic Record*, vol. VI, no. 10, May, 1930); Roland Wilson and K. S. Isles, articles on Australian Monetary Policy (*Economic Record*, vol. VII, no. 12, and vol. VIII, no. 15); D. B. Copland, *Credit and Currency Control with Special Reference to Australia* (Melbourne University Press, 1932); Gordon Wood, *Borrowing and Business in Australia* (Oxford, 1930).

NEW ZEALAND: J. B. Condliffe, *New Zealand in the Making* (London, 1930); New Zealand Monetary Committee, 1934, *Statement submitted by the Treasury*,

variables of first importance. Periods of prosperity are based upon rising prices of export staples, rising volumes of exports, and—if the country is still pretty young—upon the import of capital. The way in which these variables produce their effects is dependent upon the way in which people dispose of their increased incomes and borrowings (along the lines discussed in the preceding chapter), upon the extent of local industrialization and the complexity of production, and upon the local structure and foreign connections of the financial system.

The Up-swing. The revival of export incomes and of foreign borrowings after a period of stagnation will set in motion the following series of events. On the one hand the liquidity and lending power of the banking system, and indirectly of the whole financial system, will be increased—on the assumption that the financial institutions including the central bank are willing to hold the newly-acquired foreign funds (or transform them into gold) and that they regard these as liquid assets or reserves.² The development of liquidity may come about in two ways. Exporters may sell their foreign funds to the banks and use the proceeds to repay outstanding debts to the banks and other creditors; or else the exporters may keep the money themselves on deposit or they may spend it, passing the deposits on into the accounts of other people; and in either

Minutes of Evidence (Government Printer, Wellington), pp. 1-13; H. Belshaw, "Stabilization in a Dependent Economy" (*Economic Record*, vol. XV, supplement, April, 1939).

SOUTH AFRICA: C. G. W. Schumann, *Structural Changes and Business Cycles in South Africa, 1806-1936* (London, 1938); S. Herbert Frankel, *Capital Investment in Africa* (Oxford, 1938); F. W. Paish, "Forecasting Foreign Trade" (in *Some Modern Business Problems*, edited by Arnold Plant, London, 1937).

CANADA: H. A. Innis and A. F. W. Plumptre (eds.), *The Canadian Economy and Its Problems* (Canadian Institute of International Affairs, Toronto, 1934); D. C. MacGregor, reports published in the London and Cambridge Economic Service, 1933-9; J. Viner, *Canada's Balance of International Indebtedness, 1900-1913* (Cambridge, Mass., 1924); W. A. Mackintosh, "Some Aspects of a Pioneer Economy" (*Canadian Journal of Economics and Political Science*, vol. II, Nov., 1936).

Also for a general survey see A. F. W. Plumptre, "The Nature of Political and Economic Development in the British Dominions" (*Canadian Journal of Economics and Political Science*, vol. III, Nov., 1937).

²It is important to emphasize that this chapter, as its title indicates, is concerned with the course of events under the traditional régime of a fixed foreign exchange rate with no governmental restrictions upon exchange dealings.

of these cases the ratio of (domestic) advances to deposits will fall while the volume of liquid foreign assets will rise. Thus the banking and financial system will be in a better position to meet any new demands for accommodation.

And new demands for accommodation are likely to arise on two or three accounts. First, as the new incomes spread through the community in the form of demand for consumers' goods, retailers' stocks may (after an initial depletion) be expected to rise in value and the banks will be asked for credit on this account. Second, the general expansion of business based on the new flow of incomes will give rise to increased business confidence and increased money-raising and spending. Third, and probably particularly important in young or fairly young countries, there will be a burst of speculation supported by borrowed money, and the rising prices of land and securities will produce a stream of spending out of speculative profits which gives further impetus to the whole upward movement.

Thus the increased ability of the financial system to lend is met by an increased desire of borrowers to borrow; and the stream of incomes steadily mounts. As it mounts the volume of importing will swell; and herein lies the possibility of exchange difficulties and the certainty that, after a time, the movement will be checked if not reversed. As the rate of imports increases, together with the growing obligations to pay dividends and interest abroad, it ultimately gains upon and overtakes the still increasing rate of exports and foreign borrowing. Then it is that the liquid assets of the banks and financial system cease to rise and start to fall; while the demand for accommodation for a time continues to increase. The liquidity of the financial system is increasingly impaired; loans are more carefully scrutinized.

The Down-swing. The situation is then easily transformed from expansion into contraction, and any one of a number of factors would suffice to change it. A check to foreign borrowings would both directly diminish incomes and at the same time would produce an internal credit restriction based upon the failure of liquid assets abroad to be replenished. The growth of mistrust abroad might well be reflected at home, and the condition of confidence deteriorate rapidly. Even more certain to produce recession would be a failure of foreign demand for the country's exports and a fall in prices. Incomes would be directly reduced and the liquidity of the financial

system would lack support; and in addition, the failure of export values would undermine confidence in the country's future and precipitate a reduction of foreign borrowing so that the adverse effects of this reduction would be superimposed upon those following the fall in export values.

The downward movement of incomes and the spread of unemployment is based upon the tendency of incomes to contract cumulatively, both because falling incomes destroy much of the incentive to expand and invest and because of the working of the "multiplier." The fall is aggravated by the loss of liquidity and the contractive processes of the financial system. Difficulties on the foreign exchange market arise because of the failure of internal incomes and demands for imports to fall as fast as capital imports and the values of exports, and because defaults on foreign interest, private and public, come slowly or perhaps not at all. The foreign exchange difficulties emerge as a shortage of liquid assets in the financial system. The process of contraction is hastened in so far as income is devoted to building up a liquid (domestic) position by the financial system and by those fortunate businesses and individuals that can do so. The strengthening of individual liquid positions comes both from the accumulation of larger pools of cash and liquid assets and from the discharge of short term indebtedness; but generally what one group gains another loses, so that the growth of liquidity tends to be particular rather than general.³

The contraction of incomes produces a contraction of the demand for imports; and will go on, for a time at least, after capital imports have ceased and export values have stopped falling. Thus, with the demands for foreign exchange falling and the current supplies stable, the situation contains the possibility that the financial system *in general* will regain some of its liquidity. As it does so, the pressure which it exerts to contract incomes further will be relieved. Reces-

³The falling prices of commodities and property increase the exchange-value of money; so that the community in general may be said to strengthen its liquid position in the sense that its cash holdings may amount to a greater *proportion* than before of the value of its property and its real income. But this method of achieving liquidity is not a very satisfactory one, partly because of the undesirable social and economic consequences of a severe fall of prices and property values and partly because these economic and social disturbances may so increase the demand for liquidity that the growing supply (in terms of the increasing *proportion* of cash available) has difficulty in catching up with it.

sion will be replaced by stagnation, and the way will be paved for recovery to take place when a favourable change in foreign or domestic circumstances promotes it.

(2) SOME REMEDIES

Variations of Interest Rates and Credit Policies. The whole of Chapter VIII was devoted to an explanation of the ways in which alterations of interest rates and credit policies might affect business conditions in the Dominions, and several following chapters examined the ways in which central banks might produce the appropriate variations; but final judgment upon the efficacy of such operations was reserved until we were in a position to consider their international repercussions. This position has now been reached.

The tentative conclusion reached in Chapter VIII was that the orthodox policy of tightening credit conditions and raising rates as a period of prosperity gained momentum might prevent some excesses of boom and would at any rate pave the way for interest rate reductions and a period of easy money which, in its turn, might do something to alleviate a depression. We may now see that the international repercussions of this policy may mitigate its efficacy.

First consider the policy of low interest rates, introduced to encourage a revival as soon as incomes start to fall. If successful, this policy will in a measure check the fall which, in the uncontrolled cyclical movement, would take place. But the preceding section of this chapter showed that this very fall in incomes played a part in restoring the foreign exchange (or gold) reserves of the banking system. Indeed it was the failure of internal incomes to fall as rapidly as income from abroad (arising from exports and foreign borrowing) that produced the decline in reserves and liquidity of the financial system. Thus a policy designed to maintain the level of domestic incomes would postpone the restoration of liquidity; and might also postpone the time at which the financial system could support a new period of expansion.

Given a central bank competent to undertake purchases of securities or other expansive operations, the local cash reserves of the financial system can be augmented and liquidity increased despite a continuing loss of foreign exchange. Such a situation apparently existed in both Australia and New Zealand in 1938 and 1939. But this policy cannot be associated with the con-

tinued maintenance of free dealings in exchange at a stable rate. If liquidity and the volume of incomes are maintained by domestic policies, the seepage of foreign exchange will continue. Eventually either the support of the exchange or the freedom of dealing on the market will have to be abandoned in the face of falling foreign income, or else internal incomes will have to be allowed to fall in order to replenish the stocks of foreign exchange.

If the easy-money policy was successful in preventing business recession it might conceivably check an outflow or cause an inflow of capital. Such capital movements, based on the better prospects of local business, would offset the tendency to lose foreign exchange. The expansive policy would not be self-defeating. But this is not a very likely occurrence. Lowered interest rates, relative to those abroad, are in themselves likely to cause capital to move away from the country, not towards it. Moreover, business men and capitalists seem able, perhaps all too ready, to distinguish between "natural" prosperity based on expanding exports and private enterprise, and "artificial" prosperity based on cheap money and other governmental expedients. The latter type of prosperity does not usually attract capital from abroad; indeed it more often causes a flight which precipitates acute exchange difficulties.

Next consider the other phase of orthodox policy, that of raising rates and tightening local credit conditions in a time of rapid expansion. In so far as the policy is successful in restricting local money incomes and speculative activity it will also husband some of the accumulating reserves of foreign exchange, and perhaps permit the existing level of incomes to be maintained longer than might otherwise be possible. So far so good. But if would-be borrowers find that they cannot raise funds locally they may, in a measure at least, find satisfaction in financial centres abroad. In this case some at least of the expansion which the authorities are trying to avoid will occur; and the supplies of foreign exchange reserves, accruing from the foreign borrowing, will make it difficult if not impossible to carry out the restrictive domestic policy. Further, when the period of prosperity does collapse, the increased foreign indebtedness will be a new and undesirable factor in the foreign exchange situation (that is, if we assume that the authorities were right when they determined to check the volume of borrowing, and that the increased investment of funds has not laid the basis for such increased exports

or diminished imports as will cover the increased debt service abroad). In short the resort to foreign borrowing instead of local borrowing will, contrary to the authorities' desire, ease the immediate position in the capital and foreign exchange markets; and at the expense of producing intensified difficulties at a later date.⁴

In this regard, as elsewhere, it is important to distinguish between the different forms in which international capital movements may take place, particularly between the growth of international debt and of international equity interests. The latter, involving direct investment of capital from abroad, is less rigid. Profits are likely to be earned and dividends transferred abroad when the country is prosperous and when ample foreign exchange is available for the purpose. Certain sections of Canadian industry have been largely financed by direct investment of capital from the United States, and the peculiar role which capital movements on this account play in the balance of payments is described in Chapter XVIII, section (2). In other Dominions direct industrial investments, chiefly from Great Britain, seem to be increasing; in South Africa the direct investment in mining has been very great indeed. In so far as local capitalists, escaping the restrictions of central banks, raise money abroad in this form the subsequent difficulties to be encountered in the exchange market will be lessened.

Timing of Public Works. It is often suggested that if the capital expenditures of Governments were better timed a good deal of the severity of business cycles might be eliminated. In the ordinary course of events, it is pointed out, Governments tend to increase their capital expenditures just at the time when private concerns are increasing theirs; and thus the fluctuations of the capital goods industries, generally acknowledged to play a leading role in business movements, are aggravated. Surely the Governments might time

⁴We are not forgetting that, if funds are borrowed abroad and expended locally, incomes will multiply and some local accumulation will take place. If the authorities were entirely successful in preventing any increase in local lending, these accumulations would have to find outlet abroad; and this export of capital would alleviate the growing debtor position of the country. However, the accumulations arising from the increased incomes could not equal the foreign borrowing unless the marginal propensity to import was 0—which is extremely improbable. Thus, however vigilant the authorities in restraining local lending, the increasing indebtedness of the country cannot be entirely offset by its own repercussions.

their activities so as to level out instead of amplify the changing demands upon the capital goods industries?

While something may be hoped from better timing of public works the effect is easily exaggerated. The argument, as sketched above, is based upon an essentially false dichotomy between "Government" and "business." Capitalist society includes its governmental bodies; and it is the whole society that pulsates. Nor are political representatives and their civil servants more far-sighted, more free from errors of optimism and pessimism, than the business and financial community. The interconnection between Government and business must be abundantly clear to any student of the histories of the Dominions. The development of these countries has been such that in every surge of expansion Governments and private business have co-operated. And in periods of recession and stagnation Governments, no more than businesses, can tell where new demands are likely to arise. If the business man is uncertain where to build his factories, if the banker is uncertain where to place new branches, so the politician and civil servant are uncertain where to build public utilities and schools. All may be sure that the country's long-run prospects are rosy, all may know that the population is growing in numbers and requirements, all may know that a period of low wages and interest rates is propitious for the extension of fixed equipment; but fixed equipment is fixed, while the location and desires of the people are volatile. This problem is specially acute in the Dominions, where basic developments still concern the speculative exploitation of natural resources. Moreover, the lands of the great open spaces are prey to local and regional jealousies, and political responsibility may be divided rather than centralized. The political problems of implementing a scientifically devised policy of public works are so much the greater.

In some measure, however, a better timing of public (and private) works is probably possible; and if possible it seems desirable. But some of the foreign exchange difficulties, already noted in connection with the appropriate variations of interest rates and credit policies, might be expected to arise; and in so far as the central monetary authorities are responsible for the timing of public works they will be wise to keep an eye on the foreign exchange situation.

Pump Priming. In recent years it has often been suggested that recovery from depression can be promoted by a judicious dose of public expenditure. This, it is claimed, will immediately increase the flow of incomes and the demand for consumable goods; and from this a renewed demand for capital goods will arise on the part of private concerns. As these concerns increase their purchases of capital goods the Government can taper off its outlays and finally stop them, leaving the machinery of private capitalism, now properly primed, pumping out its normal quota of goods of all sorts.

There are several reasons why this process is not likely to work smoothly unless circumstances are specially propitious. The most fundamental may be summarized by saying that private capitalists prefer private capitalism. They are naturally jealous of the incursions of the state into an increasing number of fields which they had regarded as their preserves, they are generally hostile to measures which entail borrowing and an increase in future taxation unless those measures are specifically designed to assist or co-operate with private ventures; and in many cases they are suspicious of state action which promotes re-employment and checks the reductions of wages and reductions of costs which usually accompany depressions. Moreover, they feel unable to rely fully upon the permanence of any measure adopted as a palliative by an elected body. Thus they are inclined to be both thankless and unresponsive to pump-priming measures taken at least partly on their behalf: in particular, they are not likely to consider the increase of consumers' demand sufficiently "natural" and permanent to justify any appreciable extension of capital equipment. The capitalists are glad enough to make hay when the Government turns on its expensive violet-ray machine, but it is natural sunshine that induces them to expand their plants and make long term commitments.

In the Dominions pump priming is liable to achieve less success than in more mature and more self-contained communities. First, the maintenance of incomes during a depression is likely, sooner or later, to produce a shortage of foreign exchange. Moreover, the chief independent variables producing periods of prosperity and depression in the Dominions are the values of exports, while in more self-sufficient countries the chief variables are expenditures on capital equipment. In the latter, therefore, government expenditures upon capital goods do at least go to the root of the depression;

but in the Dominions the fundamental cause—the collapse of the export industries—is untouched. Indeed, in so far as the Government's pump-priming expenditures maintain wages and other costs the export industries may actually be damaged.

Long Run Growth of Debt and Taxation. So far we have been considering government expenditures in one form or another as a remedy for business cycles in the Dominions; and in general the conclusions have not been encouraging. People who believe or hope that the cycle is a skin disease, a "purely monetary phenomenon" to be cured by an injection of stamp-scrip or social credit or orthodox central banking, will disagree with what has been said. And perhaps they are right.

It is, however, important to add a few words in defence of public works and government expenditures in general, lest the daughters of the Philistines rejoice. To say that government expenditures may be of limited effectiveness in eliminating cyclical movements is *not* to say that government expenditures are undesirable, that growing government debt is likely to produce catastrophe, or that growing taxation is likely to crush industry.

The fact is that government expenditures and debts and taxes are likely to continue to grow; and this is a matter to be contemplated without heart failure. It appears, to some writers at least,⁴ that the fields where private enterprise can foresee profits are narrowing; in the Dominions particularly the profitability of industry nowadays can hardly be expected to be what it was when the frontiers were opening up, virgin natural resources were being exploited, exhaustion of resources was for the most part remote, and population was growing rapidly on the strength of immigration and other causes. All these factors of growth naturally tempted a large volume of private borrowing and investment in equipment of all sorts. The borrowing and expenditure maintained—with lapses—a high level of incomes and employment. But today there seems less

⁴See, for example, J. M. Keynes, *The General Theory of Employment, Interest and Money* (London, 1936); also A. G. B. Fisher, "Investment Policy in a Progressive Economy" (*Economic Record*, vol. X, Dec., 1934, pp. 149-66); also Professor Fisher's evidence to the Royal Commission on Monetary and Banking Systems in Australia, 1936; also *An Economic Program for American Democracy*, by Seven Harvard and Tufts Economists (New York, 1938); also A. H. Hansen, "Economic Progress and Declining Population Growth" (*American Economic Review*, vol. XXIX, March, 1939).

prospect for private profit. On the other hand, there is much to be done in the way of improving the various countries' capital equipment: in the country there are roads to be surfaced, lands to be reclaimed or improved; in the towns there are inadequate housing and recreation facilities for the poorest groups, and many other deserving objects. Private enterprise cannot or will not undertake expenditures upon such objectives. The alternatives seem to be for the state to undertake them, using the available men and other resources of society for the purpose, or else for these men and resources to lie unused, with resultant damage to the unemployed themselves and to the general standard of living. Amongst some circles of employers there exists a dog-in-the-manger attitude: they themselves cannot or will not provide the employment, for they can see insufficient prospect of profit, but they are extremely unwilling for the state to do so.

It is often objected that for the state to extend its operations would lead to an increase of debt; and then it is asked, how will the debt be repaid and how serviced? Throughout the history of capitalism, prosperous periods have been ones when borrowings and spendings have increased. Any *general* effort to pay off debt results in a general liquidation of the financial structure, widespread depression, and often panic. There is nothing more injurious to the working of capitalist society than the *general* repayment of debt. Individual bankers and financiers must see to it that their loans turn over. But what becomes of banking and finance, to mention only two important sectors of capitalist society, if everyone repays debts and no one borrows? As for finding revenues out of which to service debt, the Government finds those revenues in the same place as private capitalists with debts to service: i.e., in the incomes of the people. The capitalist obtains the revenues by adding something to the price of his product, the Government by imposing a tax. For both, the revenue is more easily found when the community's income is large and expanding than when it is small and contracting; and the income will only be large when some people in capitalist society, business men or Governments or preferably both, are engaged in borrowing and spending the proceeds.

And what of the foreign exchange situation if government management and government initiative pervades an increasing sector of the national life? We are now considering long run, rather than

cyclical alterations, and over the longer periods substantial changes may occur in the community's propensities to import, save and consume home commodities. There is some reason to believe that extended government capital expenditures of the types suggested are not very likely to foster exports or even to compete with and reduce purchases of imports—unlike so much of the expenditures, public and private, in the past. If a chronic deficiency of exports develops, the authorities may follow one of three paths: (1) allow chronic unemployment to develop for a decade or so, thus checking imports and eventually encouraging exports by means of reduced costs of production, (2) allow the exchange rate to depreciate to a position in closer conformity with the new state of demand and supply, (3) raise tariffs or in some other way improve the trade balance. Of these three alternatives the first is the worst.

Summary of the Cyclical Problems Confronting a Central Bank under a Régime of Fixed Exchanges. From this digression into long run affairs, which are really beyond the scope of this book, we may return to consider and summarize the cyclical problems facing a central bank committed to a stable exchange rate and to free dealings on the exchange market. The basic problem may be stated thus: The economies of the Dominions are still chiefly although decreasingly designed for the production and sale of exports. The supplies of foreign exchange derived from these exports are subject to wide fluctuations. The central bank cannot do much to alter the amount of this foreign revenue; taking good times with bad there is a certain amount available and no more. Nor can the central bank do much to alter the way in which individuals dispose of their incomes; like the supply of foreign exchange, the marginal propensities to consume home products, to accumulate and to import are part of the data of the central bank's problems.

The central bank has a certain measure of power over the volume of money incomes in the country through its ability, limited in the case of some Dominion central banks, to influence interest rates and bank reserves. To this is added its power to lend to Governments and, as government banker, to influence government financial policies particularly in regard to the volume and terms of borrowing. The temptation will always be, particularly when a considerable volume of unemployment exists, to take steps designed to increase incomes and employment. The danger will always be that a per-

sistent policy of this sort will sooner or later produce a shortage of exchange and an illiquidity of the banking system; and if this is relieved by internal credit expansion the free dealings in exchange at the stable rate will ultimately have to be abandoned.

In some degree the central bank may be able to smooth down cyclical movements of incomes. It may be able to make the disbursements of foreign exchange more even than the receipts. (We have seen that, in the absence of a central bank, the tendency is for disbursements to fluctuate about as widely as receipts, but lagging somewhat behind them.) Husbanding exchange by restraining expansion in good times will be unpopular. It may also be technically difficult. The restraint of borrowing at home may turn borrowers to foreign sources, and this will support the undesired internal expansion. Moreover, it will temporarily relieve the illiquidity of the financial system, but ultimately it is likely to increase the foreign exchange difficulties. There is also another sort of dilemma, such as arose in Canada in the latter nineteen-thirties. There the incentive to borrow and expand operations locally was insufficient on the one hand to carry away the available savings, and on the other to maintain a reasonably full volume of employment. In this case the central bank and Government had to decide whether it was better to accept a low level of incomes and continue the redemption of foreign debt out of excess local savings or alternatively to press forward with vigorous policies of government expenditure to the immediate benefit of incomes and employment but to the ultimate worsening of the exchange situation.⁶

The matter can be stated in the mathematical terms devised in the last chapter. If the propensity to import is given as $\frac{3}{8}$ and the

⁶See the Memorandum prepared by G. F. Towers, Governor of the Bank of Canada, entitled "Should Canada Use the Available Surplus in the Balance of Payments to Increase Imports rather than Repatriate Debt?" and submitted to the Banking and Commerce Committee of the House of Commons, 1939, *Proceedings and Evidence*, pp. 560-2. In defending the existing rate of debt redemption Mr. Towers emphasized, first, that much of the high current value of exports involved the depletion of mineral and forest resources and, second, that the *volume* of imports of consumable goods was about as large in the later nineteen-thirties as in the later nineteen-twenties. See also *ibid.*, p. 624. He did not discuss whether some improvement of the short term, liquid international position would have been preferable to the redemption of an equal amount of long term debt. See the discussion of this point at the end of chap. XVIII.

total volume of available export income is x over a cycle of good and bad times,⁷ the aggregate income which can be maintained without exchange difficulties over the period is $\frac{5}{6}x$. This, at least, is so if the domestic incentive to borrow and invest just carries off the volume of accumulation out of this income. If the propensity to accumulate was $\frac{1}{2}$, the total volume of accumulation available during the period would be $\frac{3}{4}x$. In actual fact, however, the prevailing circumstances and outlook may be such as induce a volume of borrowing either greater or smaller than this, in which case a larger or smaller volume of incomes will exist internally and foreign borrowing or foreign lending and repayment of foreign debt will occur.

Leaving foreign borrowing and debt repayment aside for the moment, the central bank's problem appears to be the production of an income of $\frac{5}{6}x$ over the whole period. But, if income is kept steady at a level which will produce this total by the end of the period, there is no guarantee that, on the one hand, a reasonably full degree of employment will have been maintained, or, on the other, that a degree of inflation will not have occurred. Re-introducing the possibility of foreign borrowing and lending, a further decision must be made by the central bank: that is, whether to permit such a high level of aggregate borrowing and of incomes as induces borrowing from abroad—which may store up trouble in the future if the borrowing does not facilitate exports or import-competing goods—or whether to permit such a low income as will permit the repayment of foreign debt but may entail domestic depression and distress.

In conclusion, it may be seen that, close to the root of a central bank's difficulties, as far as we have discussed them, lies its inability to control the value of exports and the marginal propensity to import. On account of those uncontrollable factors a central bank, which is committed to exchange stability, may be unable to produce or even to allow what would appear to be a reasonably high level of

⁷We seem to imply here that a central banker knows what foreign income is available, or is going to be available, over the course of a cycle. The estimation of this is, in fact, one of the difficult problems which confront him. Despite this difficulty, however, the central bankers of the Dominions are more favourably placed than their *confrères* in many other countries, because the economies of the Dominions are *relatively* simple and their behaviour is *relatively* predictable over fairly short periods of time (a few months or even a year or two). Over longer periods their behaviour may be, as we have seen earlier, specially unpredictable.

production and employment. Even at the peaks of up-swings such a level might seem too high a mark in the eyes of authorities whose duty lay in mitigating fluctuations and conserving foreign assets. The enormous attractiveness of exchange movements as a means of central bank control lies in the fact that these movements may alter in the appropriate directions both the values received from exports (in terms of local currency) and the propensity to import. Apparently, at least, the possibility of conscious, purposeful exchange movements opens up a whole new realm for central bank action, and to its consideration we now turn.

CHAPTER XVII

VARIABLE OR FIXED EXCHANGE RATES?

(1) THE CASES FOR DEPRECIATION, FLEXIBILITY, AND STABILITY

DURING the nineteen-thirties there have been many discussions of the relative merits of the traditional policy of stable exchange rates and of alternative policies such as an occasional depreciation to relieve hard times or a flexible rate to mitigate business cycles. It is natural that people in the Dominions, with their newly found freedom in regard to the exchange rate, should participate in the arguments. Moreover there are special factors which suggest that for the Dominions the advantages of traditional stability may be less, the advantages of occasional or frequent movements may be greater, than for countries which occupy more dominant positions in the world economy. Therefore special importance is given to examination of the new proposals from the point of view of the Dominions.¹

¹The following select bibliography may be of use to students who wish to pursue the subject in greater detail than is possible here:

AUSTRALIA. *Report of the Royal Commission appointed to Inquire into the Monetary and Banking Systems at Present in Operation in Australia* (Canberra, 1937); Evidence presented to the same Commission by Professors Giblin, Melville, and Hytten (*inter alia*), also by the Commonwealth Bank and the Bank of New South Wales; *Economic Record*—articles by E. C. Dyason, *et al.*, "Restoration of Economic Equilibrium" (Nov., 1930, pp. 170-87), by W. R. Dougall, "Exchange Rates and Australian Prices" (May, 1931, pp. 125-7), and by W. B. Reddaway, "The New Exchange Rates" (Dec., 1936, pp. 187-94); Circulars of the Bank of New South Wales—"Stability or Parity of Exchange" (Jan. 19, 1932), also "Should the Exchange Rate Be Used to Support Economic Activity" (May 25, 1932); volumes of documents edited by D. B. Copland and others—*The Battle of the Plans* (Sydney, 1931), *The Australian Price Structure, 1932* (Sydney, 1933), and *Cross Currents of Australian Finance* (Sydney, 1936); E. R. Walker, *Australia in the World Depression* (London, 1933); D. B. Copland, *Australia in the World Crisis, 1929-1933* (London, 1934); B. A. Rouch, thesis on "Exchange Depreciation and Central Bank Policy," prepared for and deposited in the Economic Department of the Bank of New South Wales, Sydney.

Depreciation. In recent years depreciation of the foreign exchange rate has been urged in many countries and by many groups as a remedy for depression. In the Dominions the case has usually been made in connection with a drastic fall in the prices of staple exports, such as occurred in the years following 1929. It is pointed out that the impact of such a fall upon the economy is two-fold. There is the primary decline in the incomes of the exporting group; and there are the repercussions, the secondary declines in the national income, which are generated by the failure of the export group to maintain their purchases of home-produced commodities and by the damage done to business confidence and the incentive to invest whenever the export industries, fundamental as they are to the economies, suffer a reverse.

If the exchange rate is allowed or even encouraged to depreciate in the face of falling demand for exports in foreign markets, then, so it is said, most of the secondary repercussions may be avoided. To the extent that the exchange rate depreciates, exporters should receive greater returns (in terms of the local currency) from their sales in foreign markets. Thus the domestic level of exporters' incomes may be maintained, and with it exporters' demands for locally produced commodities and the general level of business confidence. Further, it is argued that depreciation and the main-

NEW ZEALAND. *Report of the Economic Committee, 1932*, and *Report of the Monetary Committee 1934* (Government Printer, Wellington); *Minutes of Evidence* of the latter Committee—evidence presented by the Treasury, by Professors Tocker and Williams (*inter alia*) and by the Associated Chambers of Commerce of New Zealand; Special Bulletin of the Canterbury Chamber of Commerce, Christchurch, New Zealand, Feb., 1933, "Future Exchange Adjustments"; A. G. B. Fisher, "A Policy for a New Zealand Reserve Bank" (*Economic Record*, Dec., 1935, vol. XI, pp. 157-66).

SOUTH AFRICA. *Report of the Select Committee on the Gold Standard* (including Mr. Kentridge's Draft Report), House of Assembly, Union of South Africa, May, 1932; C. G. W. Schumann, *World Depression, South Africa and the Gold Standard* (Cape Town, 1932); *South African Journal of Economics*—articles by S. H. Frankel, "South African Monetary Policy" (vol. I, 1933), and by A. J. Limebeer, "The Gold Mining Industry and the Gold Standard" (vol. III, 1935); S. H. Frankel, articles in the *Economist* (London), Sept. 19, 1936, and in the *Economic Journal*, vol. XLIII, 1933, p. 93.

CANADA. Evidence Presented by the Provinces of Manitoba, Saskatchewan and Alberta to the Royal Commission on Banking and Currency in Canada, 1933, and to the Royal Commission on Dominion-Provincial Relations, 1937-8; *Pro-*

tenance of local money incomes will obviate the damage which falling price levels always inflict upon the debt structure. Unnecessary deflation, unnecessary defaults and failures and bankruptcies will be avoided; and thus the capitalist and rentier classes, who are often supposed to be the chief if not the only beneficiaries of a period of falling costs and prices, actually stand to gain from depreciation.

This is not to argue that depreciation can remove the primary effects of a fall in export values abroad, and of the decline in foreign borrowing which often accompanies such a fall. To the extent that borrowings fail and that the value of exports falls more rapidly than the prices of imports the volume of imports is bound to decline. And with a fall in the volume of imports the (real) national income is practically bound to fall also. Recognizing this, the advocates of depreciation claim that their policy distributes the inevitable burden more equitably. In the absence of depreciation the initial burden falls entirely upon the exporters and the secondary repercussions often appear in the form of unemployment; and thus certain groups suddenly lose the greater part of their incomes. When depreciation takes place, however, the burden is spread over all those who purchase goods abroad or who have foreign debts to pay, for they have to pay more for foreign exchange; and by and large this group directly or indirectly includes the whole community. With depreciation few lose their incomes and means of livelihood; all, in greater or smaller measure, face increased costs of living and doing business.

So far the argument may be summed up in this way. A fall in

ceedings of the Canadian Political Science Association—contributions by G. G. Coote (vol. III, 1931, pp. 117-22), by A. F. W. Plumptre, J. P. Day, and G. F. Towers (vol. IV, 1932, pp. 139-60), and by G. A. Elliott and others (vol. VI, 1934, pp. 251-75); *Canadian Journal of Economics and Political Science*—article by J. S. Allely, "Some Aspects of Currency Depreciation" (vol. V, Aug., 1939, pp. 387-402); H. A. Innis and A. F. W. Plumptre (eds.), *The Canadian Economy and its Problems* (Canadian Institute of International Affairs, Toronto, 1934); D. W. White and J. L. McDougall, "The Impact of the Depression upon Canadian Manufacturing Industry" (*Canadian Banker*, vol. XLIV, Jan., 1937, pp. 158-67); F. A. Knox, series of four articles in the *Canadian Chartered Accountant*, 1936, concerning "International Accounts"; United States Tariff Commission, *Report on the Effect of Depreciated Currency upon Imports of Wood Pulp and Pulpwoods* (Washington, 1933); G. F. Towers, "Foreign Exchange, its Effects on the Pulp and Paper Industry" (*Pulp and Paper of Canada*, May, 1932, p. 111); also an article in the same journal, "Pulp Markets upset by Currency Depreciation" (Nov., 1932).

export values and foreign borrowing entails a lower volume of imports. The essential question is whether this lower volume shall be produced by a decline of incomes falling with special severity on certain groups; or whether it shall be produced by allowing the price of foreign currencies to rise when their supply in the exchange market falls away.

Finally, the depreciators argue, their policy avoids a whole host of politico-economic problems which otherwise emerge from a decline of the money value of exports and national income. Such a decline inevitably involves government interference in the debt structure and in the sanctity of contract. Also, unless the decline in domestic incomes follows with extraordinary speed and severity, falling incomes from abroad involve foreign exchange difficulties with the likelihood of further government interference in the exchange market in the form of a rationed or blocked exchange system. Moreover, in the attempt to relieve the foreign exchange situation and the local depression, Governments will be impelled to raise tariffs. Tariffs will maintain costs and prices of goods produced at home, to the further detriment of the exporting groups; and if the tariffs evoke foreign reprisals these groups will be still more greatly afflicted.

Flexibility. Closely connected with the case for depreciation is another, which some economists have put forward, for the use of a flexible exchange rate as a means of reducing cyclical movements of economic conditions. This plan may be most easily described along the lines of the previous chapter which outlined the nature of cyclical movements in the Dominions in the absence of exchange variations. There it was pointed out that, in trying to control a cyclical movement, the central bank's chief handicap lay in its inability to influence either people's propensity to import rather than to consume, or the values received from exports in terms of local currencies. A depreciation of the exchange at once increases the latter and diminishes the former; which is just what is most necessary in order to promote a revival of domestic incomes. The increased value of foreign currencies tends directly to increase the incomes of exporters; and in addition it will lower the marginal propensity to import and raise the marginal propensity to purchase home products and thus raise the multiplier. If, by these changes, the total volume of local incomes is kept at a higher level than other-

wise, the incentive to invest will be kept higher; and this will give further support to local incomes. Exactly the opposite set of influences is initiated by an appreciation of the foreign exchange rate. Incomes from exports will be depressed, there will be a shift from home consumption to imports, the multiplier will be diminished, and local investment will be discouraged. In short, an appreciation of the exchange tends in several ways to eliminate the basis of a boom.

Not only may the movements of the exchange rate exert the appropriate influence upon the values of exports and distribution of expenditures; they may also affect the liquidity of the banking system in the required directions. Thus a depreciation of the exchange raises the price of gold or London funds or whatever foreign assets the banking system holds as liquid resources. (Actually, if fluctuations are expected to be frequent the commercial banks will probably cease to hold as reserves assets which fluctuate in value in terms of their local deposit liabilities. Thus it will be the central bank and indirectly the Government which stand to make profits and losses in this regard.) Moreover, the depreciation will tend to check the adverse balance of payments by encouraging exports and retarding imports, and thus the banking system may start to gain instead of to lose liquid assets. On both these counts it will be in a better position to support the level of local incomes; at any rate it should be relieved of the necessity, born of illiquidity, of actively promoting a deflation. On the other hand, an appreciation of the exchange rate will lessen the liquidity of the banking system and hasten the time when the boom is checked by the inability of the capital market to support it.

In short, so far as we have carried the argument, a régime under which a variable exchange rate is wisely employed to iron out cyclical fluctuations seems to be one in which all things work together for good; and indeed this is basically true, at any rate under favourable conditions. There is little doubt that if business men believed in the flexible exchange policy, if Governments pursued it disinterestedly, if financiers did not precipitate movements by speculation which was too far-sighted or too short-sighted, and if conditions in export markets were fairly propitious, it would be ideal for the Dominions. These are big "ifs", but the principle remains.

Stability. The case for stability is partly positive; and it is also

partly negative in that it casts doubts upon the benefits to be expected from depreciation and flexibility. Positively, it is argued that stable exchange rates are good in themselves because they encourage international trade and international movements of long term capital. Thus they promote the international division of labour, carrying with it the advantages of specialization, large scale production, and higher standards of living for all concerned; they also permit capital to move to those parts of the world where it seems likely to be most productive. Lasting trade relations cannot easily be maintained between countries whose currencies vary in terms of each other;² although the existence of a market in exchange futures may make it possible to hedge against the exchange risk involved in a single shipment or a single transaction covering some period such as three or six months. Nor will international long term lending take place if the contract seems likely to be severely distorted for the lender or, more likely, for the borrower by movements of an exchange rate.

Further, all the arguments, all the forces of conservatism—particularly influential in the field of finance—are usually arrayed on the side of stability. This has been the traditional behaviour of the exchange rate, and around it have been built up time-honoured and time-tested practices. The dependence of the Dominion capital markets, and particularly of the commercial banks, upon liquid assets abroad is evidence of this. A conscious positive movement of the exchange, moreover, will be the result of interference by the Government or a government agency, and as such it will be distrusted and deplored. Thus exchange movements are likely to be unsettling to business prospects and financial confidence with un-

*In pure theory the risks to traders and others from those exchange movements which are the result of fundamental changes in the balances of payments may be shown to be little if at all greater than the risks from general inflations and deflations which are the attendants of similar changes in the balances under fixed exchanges. See R. B. Bryce, letter in the *Economist* (London), vol. CXXVII, 1937, p. 402.

Nevertheless international trade is likely to be damaged by fluctuating exchanges; partly because traders are more aware of the dangers of exchange fluctuations than of the dangers of inflations and deflations, partly because movements of exchanges are likely to result from temporary speculative causes as well as fundamental alterations in the balances of payments, and partly because, since absolutely free exchange rates are intolerably unstable, the so-called free exchange policy involves the introduction of government regulation.

toward effects upon the incentive to invest and the economic condition of the country.

This unsettlement may show itself in sudden and unmanageable flights of capital into or out of the country. These speculative movements, involving heavy pressures upon the exchange rate, are likely to obstruct the monetary authorities in the execution of their policies. In order to maintain the exchange rate at the level they consider beneficial to the country at large they may have to impose restrictions upon the movements of funds, introducing some scheme of rationing the available exchange. Thus, so far from avoiding rationing as the advocates suggest, exchange movements may actually hasten its adoption.

We may turn now to the negative part of the stabilizers' case. Their most important argument against the alternative policies is that depreciation, either by itself or as an aspect of flexibility, is not likely to support the incomes of exporting groups. If exporters are to gain it must be either from raised (domestic) prices, which will arise only in so far as the prices of their goods on foreign markets do *not* fall as a result of depreciation; or else it must be from an increased volume of exports at the old (domestic) prices, the increased volume being possible on account of the lower (foreign) prices they can accept and their consequently stronger competitive position in markets abroad. Either of these conditions, or a bit of both, would yield larger local incomes; but the stabilizers are doubtful regarding both. It appears to them that prices in foreign markets are extremely likely to fall as a result of depreciation because this policy is *ex hypothesi*, to be undertaken in a time of depression when gluts exist and "buyers' markets" are the rule. Nor is much to be hoped from an expansion in the volume of exports as a result of an improved competitive position; for many of the Dominions' chief exports are agricultural and pastoral products, the volume of which cannot quickly be changed. If this is a true picture of the situation the depreciating country may expect to gain practically none of the benefits supposedly attaching to its policy, none of the support to exporters' incomes and purchasing power, but on the other hand it will suffer all the ill effects, all the increases in cost of imports and debt service. And finally, it is argued that one exchange depreciation breeds others, both at home and abroad. When one country depreciates in search of temporary relief it incites others to do like-

wise. If any competitive advantage is gained it will be short-lived. The general result is a chaos of currency instability and the last state of all is worse than the first.

As for exchange flexibility, it has been shown that depreciation on the one hand may be worse than useless. On the other hand the stabilizers consider it most unlikely that any Government would ever appreciate the value of its currency, so great would be the opposition of the groups directly damaged. Thus owing to political exigency, a policy which purported to be a scientific one of exchange flexibility to mitigate booms and depressions would, they believe, in fact deteriorate into progressive depreciation.

(2) CONCLUDING COMMENTS

The decision whether a fixed exchange rate is preferable to a variable one is political almost as much as it is economic. It is political in that certain groups, particularly exporters and those with debts to pay abroad, stand to gain or lose conspicuously. Between these and other conflicting interests the economist as such has no means of judging. It is also political in that, as already mentioned, people of a conservative turn of mind will prefer stability as they have known it while others with a more radical bent will be disposed towards experiment in the hope of improvement. Lastly, it is a political guess whether foreign Governments are more likely to be provoked into reprisals on the one hand by exchange depreciation or on the other hand by the increased tariffs which are almost inevitable under a régime of exchange difficulties and acute deflation.

There are, however, economic considerations which provide partial basis at least for a decision. In the first place, it must be recognized that exchange movements are likely to cause disturbance to trade, business, and finance. Australian economists (who have probably given the matter more attention than any other group) seem increasingly agreed that the exchange rate ought only to be moved under exceptional circumstances. Those of them who used to favour frequent movements as a means of ironing out relatively minor movements of business and export incomes now seem more impressed by the disturbances occasioned by alterations. In countries where the banks are accustomed to publish fixed exchange rates the psychological resistance to exchange movements is inevi-

tably great. The resistance is probably less by now in Canada than in the other Dominions; for this country has in the past eight years (1931-9) become more or less inured to small movements of the exchange based upon the uncontrolled influences of supply and demand.

A second economic basis of judgment is found in the condition of the markets for export staples. This is a matter of the greatest importance for upon it depends whether the exporters' incomes can, in fact, be maintained or augmented by depreciation. It can only be decided, and roughly at that, in relation to a given set of actual circumstances. If demand is very elastic, if the amount of a commodity supplied by the particular country is not of sufficient importance to influence appreciably the price in markets abroad, then it is possible for depreciation to produce proportionately increased incomes for exporters. Unfortunately the supplies of their export staples which the Dominions provide are fairly large in relation to total supplies bought by Great Britain and other importers; and "buyers' markets" usually exist in staple commodities in depressed periods. The degree to which production and selling are organized and centralized may be an important factor. If fairly well organized, as has been the case of a good many of the products exported from the Antipodes, advantage may be taken of the depreciation; if disorganized, depreciation may lead competing sellers to rush in, hopeful of gaining from depreciation, and the activities of each will break down prices in foreign markets thus damaging the position of all and of the whole country to boot. Moreover, and for similar reasons, the extent to which buyers in foreign markets act in monopolies or cartels is a point of significance. In short, all the conditions of supply and demand for the commodities chiefly concerned deserve attention.

To say that there are reasonable economic bases for the choice of policy is not to say that accredited economists have always based their recommendations upon them. It is particularly notable that some economists in the Dominions, and perhaps even more notable that visiting economists from abroad, have made unguarded pronouncements regarding exchange rate policy. One recalls the eminent British economist who in 1930 foretold the most dire results if depreciation occurred in Australia; the American economists who assured a Canadian Royal Commission that, if Canada had depre-

ciated its currency in 1931-3, the values of Canadian wheat exports would have risen in precise proportion; the group of South African economists who, in the *South African Mining and Engineering Journal*¹ and elsewhere, foretold that an abandonment of the gold standard (for readoption of parity with sterling) would bring benefits few and transitory but would involve such an arbitrary redistribution of income and such disturbances to the national economy that it should not be countenanced. In actual fact, South Africa gained enormously by the adoption of precisely the policy that was castigated; there is no reason whatever to believe that the Canadian Government's wheat-selling policy and the price of wheat in Liverpool would have been the same if the Canadian exchange rate policy had been different; and it is easy to believe that depreciation in 1931 brought considerable relief to the Australian financial system and to the economy at large, just as the majority of Australian economists had foretold.

Not only have predictions been made on far too narrow bases, but in addition facile comparisons have been made between the Dominions and other countries in more or less similar situations. Many proponents of depreciation in Canada have invoked Australian example in support of their cause, implying if not stating that the downward movement of the Australian exchange was an act of intelligent policy. Nothing could be farther from the truth. The Commonwealth Bank, the Government, and all but one of the trading banks took great precautions to prevent the exchange from falling. There was indeed in one of the banks, and amongst economists and others, a growing belief in the benefits of depreciation; but when it occurred it was an uncontrolled movement. Had it been otherwise, had it for instance been the considered policy of the Labour Government taken apart from any pressure on the exchange, the reaction of financial and business leaders might have been quite different. Indeed the only two exchange movements that can be classed as considered acts of policy in the Dominions since 1929, rather than unwilling acceptances of the inevitable, were the downward movement of the New Zealand exchange rate at the beginning of 1933 and the *upward* movement of the Australian exchange at the end of 1931. The former was undertaken after due consideration

¹Vol. XVII, part II, 1931-2, p. 165.

had been given to advice from a number of economic experts. The latter was undertaken by the Commonwealth Bank on its own initiative, apparently under the delusion that it would be unable to maintain so low a rate as had been reached earlier in the year.⁴

Indeed there is a certain amount of misconception abroad regarding what constitutes depreciation. This comes about because of the two yardsticks by which the value of the Dominions' currencies may be measured, sterling and gold. By and large the proper yardstick is sterling; for in effect the Dominions, other than Canada, are and have been on a sterling-exchange rather than a gold standard. Their foreign financial dealings and the liquid assets of their banking systems are for the most part in sterling. In so far as this is true, the South African currency never underwent any depreciation proper; it appreciated in terms of sterling in 1931 and then simply returned to normality at the end of 1932. As for the Canadian currency, the matter is complicated by the existence of a third yardstick—the American dollar. Since the more extreme movements of the Canadian dollar in terms of sterling have almost always been in the opposite direction to contemporary movements in terms of the American dollar, it is impossible to say unequivocally when or whether the Canadian dollar appreciated or depreciated. These are matters, however, to be elucidated in the next chapter.

One final comment on exchange rate policies remains to be made, and that concerns developments over longer periods of time than we have generally been considering. Critics of depreciation and of

⁴In a sense even this movement of the exchange was the result of external pressure. An outside or black market was growing up quoting rates lower than £A 130 per £ stg. 100 which had been established at the beginning of the year. The Commonwealth Bank later explained that its reduction to £A 125 prevented a "collapse of the exchange"; and it believed that its own position was imperilled by buying London funds at the high price without any prospect of resale. But even under the conditions existing in 1931, and quite clearly under those introduced in May, 1932, when English sterling was placed with gold as a reserve against the note issue, there was practically no limit to the volume of sterling which the Commonwealth Bank could have bought if it had so desired, creating the necessary credit to do so. If people had been assured of the Bank's determination to maintain the rate at £A 130, it is extremely doubtful whether any outside market would have developed. Thus, although an outside market was at work, the movement of the exchange depended ultimately upon the willingness of the Bank to see the rate return towards parity with sterling. See the *Report of the Royal Commission on Monetary and Banking Systems, 1937*, pp. 66-7.

flexible exchanges are prone to argue, as we have mentioned, that these policies will produce a progressive diminution in the value of the currencies concerned. It must be pointed out that this danger may not be as terrible as it is made out ; particularly if, as seems probable, the Dominions are likely to owe less and less abroad rather than more and more. What policy is desirable depends upon the behaviour of prices, purchasing power, and willingness to purchase, in the markets of Great Britain and other importers of raw products. If perchance the trend of prices is downwards rather than upwards, and if a relative over-production of raw products compared with other goods continues or is intensified by technical developments, by "back-to-the-land" policies, and by other factors, then the raw-material countries may do well to engage in chronic depreciation. This may be a far happier means of encouraging the necessary shifts within their economies (from primary to secondary industries) than the possible alternative of stable exchanges combined with chronic depression and chronic difficulties in the internal debt structures. If stability at an existing rate seems to spell, according to the reasoning advanced at the end of the last chapter, the likelihood of prolonged periods of under-employment with a reasonable degree of prosperity seldom achieved, then the case for a re-alignment of the exchange rate is exceedingly strong. If the re-alignment can be accomplished under an international agreement, such as that surrounding the French depreciation of 1936, the results may be almost universally beneficial.

CHAPTER XVIII

RECENT BEHAVIOUR OF INTERNATIONAL PAYMENTS AND EXCHANGE RATES IN SOUTH AFRICA AND CANADA

THE four preceding chapters have laid down a number of principles regarding the behaviour of exchange rates in the Dominions and regarding the response of their economic systems to changing influences from abroad. At various points these principles have been illustrated by reference to actual but more or less isolated events in one country or another. But it is instructive to survey a whole cycle of events in a single country.¹

While it would be interesting to undertake such surveys for Australia, New Zealand, and South Africa, it would take more space than is available and it would, by implication at any rate, involve much duplication because the financial situation, and more particularly the situation in regard to the dependence of the financial structure upon London, is essentially similar in the three countries. The choice falls upon South Africa, because relatively little has been written upon the exchange situation in that country and because it provides a unique instance of the benefits of depreciation.

The behaviour of the Canadian exchange rate is worth special examination because, unlike the rates of the other Dominions, its fluctuations have been unrestrained either by a group of commercial banks accustomed to quote and publish stable rates of exchange or by a central bank which does likewise. Moreover, the peculiar dependence of the Canadian economy upon two outside countries instead of one results in special complications in the field of international finance and the foreign exchange market.

(1) SOUTH AFRICA, 1929-38

The period under consideration may be divided into three. The first (1929 to August, 1931) was one of growing economic adversity and financial stringency. The second (September, 1931, to the end

¹For bibliographies on recent exchange developments the reader is referred to those given in the preceding chapter, on pp. 382-4.

of 1932) was the period when South Africa was still clinging to the gold standard after sterling had depreciated, so that the South African pound had appreciated in terms of sterling. A speculative outflow of capital, anticipating the realignment of the two currencies, caused an acute financial stringency. By the middle of 1932 a precarious and painful position of equilibrium seemed to have been reached, but economic depression produced a political uprising within the party in power. A renewed outflow of funds precipitated abandonment of the gold standard. The third period (beginning in the last three days of 1932 and running to the end of our time) was characterized by a sudden and complete reversal of the situation. With the pound back at par, capital returned from abroad, credit was easy, and the country entered into a state of prosperity the like of which has seldom been seen.

General Economic Conditions and the Balances of Payments. The changing conditions may be traced in the summary of the balances of payments which appears in the table on page 396. An outstanding feature of the table is the importance of gold exports. Throughout the two earlier periods (of recession and stringency) the price of gold was stable; and the value of its exports stayed fairly constant although the rapid fall in world prices which began in 1929 was a factor reducing costs and encouraging gold mining. At the end of 1932, when the South African pound reverted to its parity with sterling, the price of gold rose proportionately, and so did the value of gold exports. The general policy of the producing mines has been to keep production fairly constant or even to *decrease* it, but to take out large quantities of the lower grade ores which the raised price of gold has brought within the margin of profitability. The rise of the *quantity* of production has been chiefly the result of the opening up of new mines; and extremely small it has been, considering the tremendous increase in the country's activities and in the value of gold exports since 1933.*

Next consider the behaviour of commodity trade other than gold. Throughout 1929, 1930, and early 1931, the value of exports was shrinking, chiefly on account of falling prices in England and elsewhere. The period was generally one of fairly tight credit in

*The following figures for gold production are given in the *Official Year Book*, 1938, p. 828, for the years 1931 to 1937 inclusive. The quotations are in millions of fine ounces: 10.88, 11.56, 11.01, 10.48, 10.77, 11.34, 11.73.

SOUTH AFRICAN BALANCES OF INTERNATIONAL PAYMENTS, 1929-36*

Receipts or Credits: *Payments or Debits*

£SA 000,000

	1928	1929	1930	1931	1932	1933	1934	1935	1936
Merchandise: Balance.....	31.8	37.7	33.1	30.7	15.9	27.1	44.7	48.9	59.7
Credits: Total.....	52.5	51.5	35.9	25.7	20.5	25.4	26.4	31.4	32.4
Debits: Total.....	84.3	89.2	69.0	56.4	36.4	52.6	71.1	80.3	92.1
Interest and dividends.....	15.8	15.7	15.1	13.9	12.6	17.5	17.6	17.9	21.8
Credits: Total.....	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Debits: Total.....	16.0	15.9	15.3	14.1	12.8	17.7	17.8	18.1	22.0
Other services: Balance.....	4.7	4.9	4.6	4.4	4.3	3.9	5.0	5.5	5.2
Credits: Total.....	3.0	3.0	2.9	2.3	1.8	2.2	2.6	2.9	3.9
Debits: Total.....	7.6	8.0	7.5	6.7	6.1	6.2	7.6	8.4	9.1
Gold: Balance.....	42.8	45.0	46.3	45.1	48.3	57.9	56.2	71.4	82.7
Credits: Total.....	44.2	46.4	47.5	46.1	48.5	69.9	56.3	71.6	82.8
Debits: Total.....	1.4	1.4	1.2	1.0	0.1	12.0	0.1	0.2	0.1
Current balance.....	9.5	13.4	6.5	3.9	15.5	9.4	11.1	0.9	4.0
Long term capital: Balance.....	2.8	1.8	9.9	0.4	4.6	2.1	12.3	3.4	10.2
Credits: Total†	2.8	0.9	10.1	1.4	4.7	1.3	21.5	13.6	13.5
Debits: Total	0.0	2.7	0.2	1.0	0.2	3.4	9.2	17.0	3.7
Residual item, including movement of short term capital, errors, omissions, etc.	6.7	15.1	1.4	3.5	10.1	7.3	1.1	4.3	14.2

*All figures taken from the annual publications of the League of Nations on Balances of Payments.

†Excluding re-investment of undistributed profits by foreign firms operating in South Africa.

South Africa, and this combined with the direct repercussions of falling exports to make imports fall at the same pace or even slightly faster, leaving an unfavourable trade balance of diminishing amount. The chief factor relieving the credit situation in this period, in South Africa as in Canada and some other countries, was a temporary revival of the import of long term capital in 1930; an import which had been checked by the stringency of the world's capital markets

in 1929 and was to be checked again by the international financial panics of 1931.

For South Africa, however, 1932 was the period of most acute stringency. As the residual figure in the balance of payments for that year indicates, there was a rapid outward movement of short term capital; and this, through the financial processes to be detailed shortly, was effective in cutting down the unfavourable balance of trade to half its previous size. Since exports were still falling, the shrinkage of imports which this entailed was very great indeed; and it was achieved partly by the rapid reduction of incomes within the country and partly by the erection of special tariffs. General tariff increases were designed, following the depreciation of sterling, partly to offset its effects and partly as a general remedy for the ills of depression. They were abolished, together with the accompanying bounties on exports in general and agricultural and pastoral exports in particular, directly the discount on sterling disappeared.

The year 1933 saw the beginning of the long period of prosperity. The value of gold exports rose sharply, and the values of other exports increased on the strength of reviving demand in England and elsewhere. Gradually, as prosperity spread throughout the Union and as incomes rose, imports responded. In 1936 the value of imports surpassed that of 1929, and the unfavourable balance of commodity trade (other than gold) far exceeded the earlier figures. Large imports of long term capital occurred from 1934 onwards. A building boom developed in Johannesburg, the centre of the gold mining industry, and lesser booms in other centres. The Union Government's tax revenues, particularly from gold mining, soared; and it was able at one and the same time to reduce its net indebtedness and to deal very generously with many groups of the population who were less directly favoured than those employed in gold production. An appreciable check occurred in 1937, when the so-called "gold scare" ran around the world, when it was rumoured that the American Government might, in view of incipient boom conditions, reduce the price of gold. South African gold shares, and other securities, fell sharply. At about the same time the values of exports of farm products fell away. Nevertheless no very serious set-back to the country's prosperity occurred.

The change in the situation of South Africa, consequent upon the rise in the price of sterling and of gold at the end of 1932, is one

of the world's most striking economic phenomena in recent years. Lucky indeed is the country for whose principal export there is an absolutely elastic demand; for in time of trouble it is in a position to gain most if not all of the possible advantages of exchange depreciation. And South Africa was specially favoured in another way. In most countries a depreciation of the exchange is regarded distrustfully by the financial and business community, but in South Africa, as things turned out, the realignment with sterling was regarded in responsible circles as a resumption of normality. The *South African Mining and Engineering Journal*³ greeted the change by heading its editorial in a seasonable fashion:

**To Our Readers
We wish a Sterling New Year!
Off Gold: The End of the Depression!**

In a week or two it was amply clear that no further depreciation need be feared. The prodigal had returned; the calf could be killed; and even the sceptics, the faithful adherents of the gold standard, soon joined the festivities.

Commercial Banks. It is now possible to examine in some detail the financial processes which accompanied these movements. This may be done by reference to charts on pages 401 and 405 which illustrate the changing positions of the commercial banks and the Reserve Bank respectively. The relevant statistics are to be found in Tables VI and VII in the Appendix.

Take first the case of the commercial banks. The tightening of their position during 1928 and 1929 can be seen in the growth of advances, while deposits actually sagged, producing an adverse movement in the advance-deposit ratio. As a concomitant their London funds (roughly indicated by "Securities and Short and Call Loans abroad") declined.⁴ By 1930, however, advances had been

³Vol. XLIII, part II, Dec. 31, 1932, p. 303.

⁴See the *Monthly Review of the Standard Bank of South Africa*, Jan., 1930, no. 191, p. 2. Mr. F. W. Paish, who was attached to the Standard Bank at the time, wrote later ("Forecasting Foreign Trade" in *Some Modern Business Problems* ed. by Arnold Plant, London, 1937, p. 85): "In 1929 the commercial banks bore the brunt of the effects of the adverse balance [of payments], that is, the bulk of the decline took place in their sterling reserves; in fact, the Reserve Bank, when approached for re-discounts, discouraged them by a sharp rise in its re-discount

brought under control and were reduced somewhat. The resulting diminution of imports of commodities combined with a temporary import of capital to produce a considerable improvement in the position of London funds.

The development of the discount on sterling in September, 1931, tended to make the condition of the banks stringent on three accounts. In the first place, the value of the banks' liquid assets in London depreciated in terms of South African currency.⁵ Secondly the expectation that the discount would be only temporary resulted in an outward movement of capital, which imposed special demands upon the foreign assets of the banking system. These took the form, partly of a purely speculative movement, which the financial authorities were at pains to prevent as far as possible; and also of the postponement of certain movements of funds into South Africa and the hastening of other movements of funds outwards. These latter movements would have occurred at some time in any case, for they had to do with current trade and debt obligations; but their concentration in this period increased the already insistent demands for liquid assets in London and diminished their supply. Thirdly, the discount on sterling tended to make South Africa's balance of commodity trade more unfavourable; a tendency that was partly but not entirely offset by the special tariffs and bounties mentioned above. Thus the banks' supplies of sterling tended to fall in volume as well as in price. Actually they managed to maintain the volume of their London funds fairly well, partly by their unwillingness to provide exchange for speculative purposes and partly by calling upon the resources of the Reserve Bank.⁶ The fact that the price rate. The result was that the commercial banks were able to replenish their London reserves only to a small extent by buying from the Reserve Bank part of its London assets. How moderate was the amount obtained in this way is shown by the small fall in the Reserve Bank's holdings of sterling bills."

"On the chart the figure for London funds for September, 1931, has not been written down in this manner. Subsequent figures for 1931 and 1932 have been. This follows the form of the published figures.

"Before the end of 1931 the Reserve Bank had managed to arrange for an exchange pool of £10,000,000 to which the two big commercial banks contributed half and the Reserve Bank the remainder. (See the *Report of the Twelfth Ordinary General Meeting of the South African Reserve Bank*, 1932, pp. 3-4.) The pool was exhausted by the middle of 1932, when the outflow of capital temporarily subsided, and was therefore not in a position to meet the renewed outflow which occurred in December.. During the second half of 1932 the banks were able to

of sterling fluctuated during the period obscures the movements of volume; but the chart on p. 401 shows the sharpness with which the value of sterling assets declined.

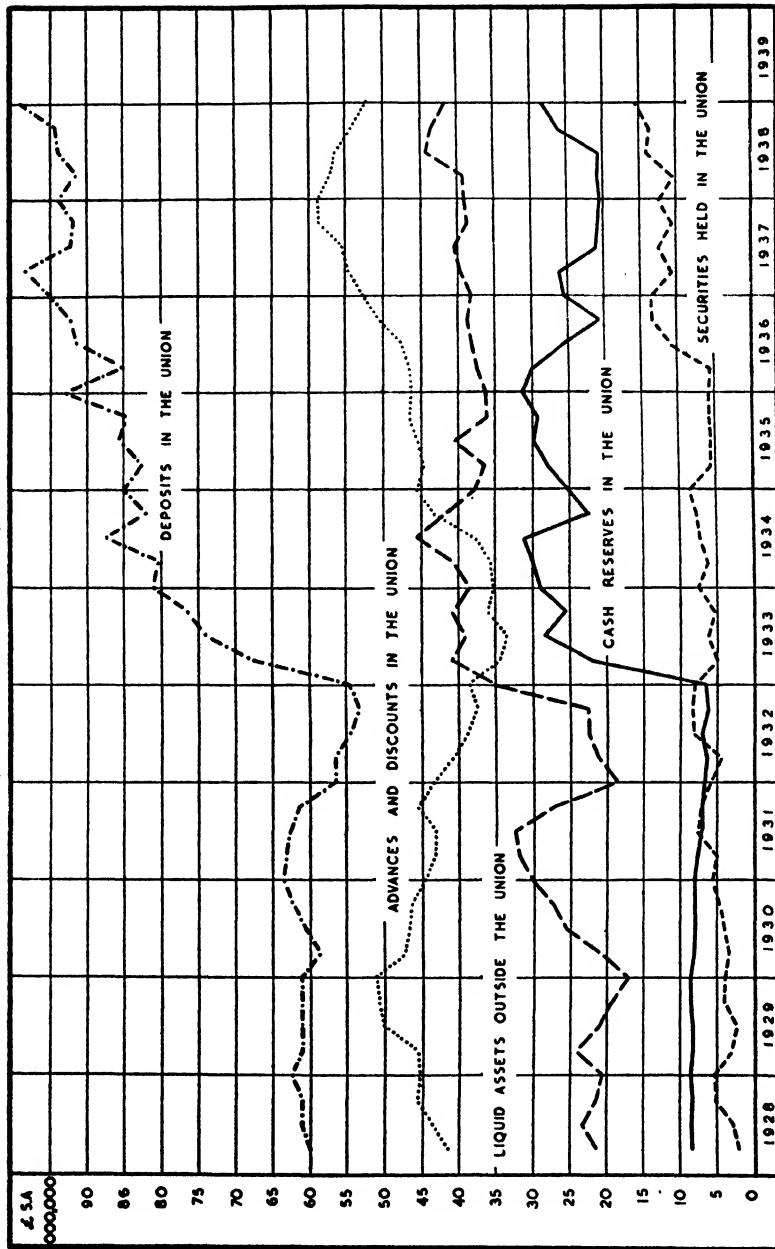
The banks played an important, if unwilling, role in the drama of acute depression. They were forced to contract credit, both because their liquid assets abroad were under pressure and because their cash reserves on deposit in the Reserve Bank were being drained away through channels we shall describe shortly. Indeed their reserves ran down towards the legal minima; and the Reserve Bank, anxious to protect its own dwindling reserves, was by no means anxious to augment their reserves by lending or rediscounting. Moreover, the banks' portfolios of rediscountable bills had been diminished by the excess demand for sterling. Thus the banks, being unwilling to sell more of their depreciated sterling assets than was absolutely necessary, were extremely cautious in their policies, and loans fell from £SA 45.6 millions in September, 1931, to £SA 37.9 a year later. The decline of incomes which resulted from this and other causes was sufficient in one year to turn a country, normally accustomed to import a substantial amount of long term capital, into a (short term) capital exporter of some £SA 20 millions in 1932. That such a change could occur, without actual rationing or blockage of the exchange market in regard to "legitimate" business, suggests that the country has a fairly high marginal propensity to import.

In 1933 the price of sterling recovered, and immediately the short term movement of funds set in the opposite direction. Now, for the opposite three reasons, the value of liquid assets in London rose sharply. The resulting liquid position of the banks was temporarily maintained because the demand for advances had not yet revived; and it was still further improved on account of an enormous increase in their local cash reserves. This was the outcome of the increased value of gold exports. The added reserves appeared in the form of increased deposits with the Reserve Bank, because the gold mines sell their gold to the Reserve Bank and deposit the cheques received with the commercial banks; and the latter then deposit the cheques with the Reserve Bank. At the same time the

restore a part of their losses of sterling in regard to their South African business.
See C. G. W. Schumann, *The World Depression, South Africa and the Gold Standard* (Cape Town, 1932), p. 107.

COMMERCIAL BANKS IN SOUTH AFRICA, 1928-38

Figures in Table vi in the Appendix



mines' deposits in the commercial banks are increased. Thus the chart on p. 401 shows the commercial banks' deposits and reserves rising together in 1933. As the mines expended the new deposits they began to circulate.⁷

In 1934 the processes of expansion were well under way. The demand for advances revived, and the super-liquid banks were only too glad to respond. Advances rose rapidly during the year, and again more slowly in 1935. Increasing advances thus supported the volume of deposits in its upward sweep. This was even more noticeable in 1936, when the banks' reserves and London funds were sagging; not, be it noticed, because of any fundamental weakness in the balance of payments but rather because the Government was taking steps to relieve the plethora of reserves in South Africa. This it did by issuing securities locally, and repaying obligations in London.

It will be seen that the banks availed themselves of the situation to get rid of part of their idle reserves and to take up South African securities. Indeed the figures for securities held in the Union showed their first substantial movement during the whole period. The banks might have invested some of their surplus funds at an earlier date by transferring them to London (buying exchange from the Reserve Bank); but they were restrained from this by their policy, mentioned in Chapter 1, of keeping a balanced international position regarding assets and liabilities.

Reserve Bank. In the chart on p. 405, representing the behaviour of the Reserve Bank, there are four curves, and something needs to be said regarding their significance. That representing the movements of gold and foreign bills shows the extent of the international assets of the Bank.⁸ The movements of these two items together depend upon the state of the balance of payments. If the

⁷See the *Monthly Review of the Midland Bank*, Jan.-Feb., 1939, p. 5, "The Disposal of Newly Mined Gold"; also E. Landsberg, "South Africa's Imports of Capital and the Balance of Payments, 1932-1936" (*South African Journal of Economics*, vol. V, pp. 285-305). The figures for bank debits in the Union show a very sharp rise at the beginning of 1933.

⁸In the chart, which reproduces figures given in Table VII in the Appendix, the gold held by the Reserve Bank is valued constantly at the old price. Thus movements in the series indicate changes in the volume of gold held. Since the Bank pays current market prices to the mines the difference between the book values and the amounts actually paid for gold currently purchased appears amongst the Bank's "Other Assets."

country's credits on current and long term capital account are tending to exceed its debits, and if the commercial banks are not anxious to hold the difference in London, the international assets of the Reserve Bank mount up whether the Bank likes it or not. Similarly it cannot directly stop a decline. It may, however, decide whether it will hold its international assets in one form or the other; for it can ship gold to London and sell it and invest the proceeds there or it may for a time hold up the shipment of gold and allow the Union's current demands for sterling to be met by liquidating its assets in London. Its behaviour in this regard may be judged from Table VII in the Appendix, but need not now concern us.

As for the note issue, movements here are almost entirely determined by the volume of wage payments and retail trade in the Union. Bankers' deposits, the third curve, represent the greater part of the commercial banks' cash reserves in the Union, and all important movements in the one are reflected in the other. (Compare charts on p. 401 and p. 405.) The lowest curve represents what may be called credit creation by the Reserve Bank. As Chapter I disclosed, the ability of the Bank to undertake open market operations is confined; but in addition it may and from time to time does discount bills or lend money to the Government, the banks, and other clients.

In the first (recession) period the weakening international position of the Union is reflected in the loss of foreign assets by the central bank, although losses were checked in 1930 by the import of capital and other factors. The position of the Bank was also eased in that year and the two following by small declines in the volume of its notes outstanding. The Bank took some steps to relieve the credit stringency which developed in 1929 and early 1930, chiefly by way of discounting domestic trade bills⁹ for the commercial banks and for private clients, and also by discounting a

"In September [1929] . . . the commercial banks were obliged to seek to replenish their reserves by presenting bills for re-discount to the Reserve Bank, thereby endeavouring to obtain additional cash in South Africa with which they could buy from the Reserve Bank some part of its reserves of sterling. . . . The commercial banks were obliged by law to keep minimum balances with it. . . . Until 1929 the commercial banks rarely, if ever, availed themselves of their right of re-discounting trade bills with the Reserve Bank" (F. W. Paish, "Forecasting Foreign Trade," p. 83).

rather larger volume of treasury bills. By means of such credit creation it supported the reserve-deposits of the commercial banks in the face of the decline in its own foreign assets.¹⁰ Thus the decline of the commercial banks' reserves in South Africa was relatively slight.

During the period in which sterling was at a discount and credit very tight in the Union the Reserve Bank again brought some relief. Like the commercial banks, the Reserve Bank found its assets in London depreciated in price; but in the attempt to defend the high valuation of the South African pound it disposed of practically all of them in the first month. It did not, however, use any of its gold reserves for this purpose. The sale of foreign assets would have resulted in an equal contraction of commercial bank reserves had not internal central bank credit been extended somewhat. Not that the Reserve Bank, with its own international assets shrinking rapidly, was a very willing lender. It raised its lending and discount rates. Nevertheless the banks' discounts ran up to a new high level, loans and discounts to private individuals increased, and the Bank supported the Union Government by taking up an unusual volume of treasury bills and by making direct loans. All these measures together were not sufficient to keep the banks' cash reserves from falling; but the fall was not as great as it would otherwise have been.

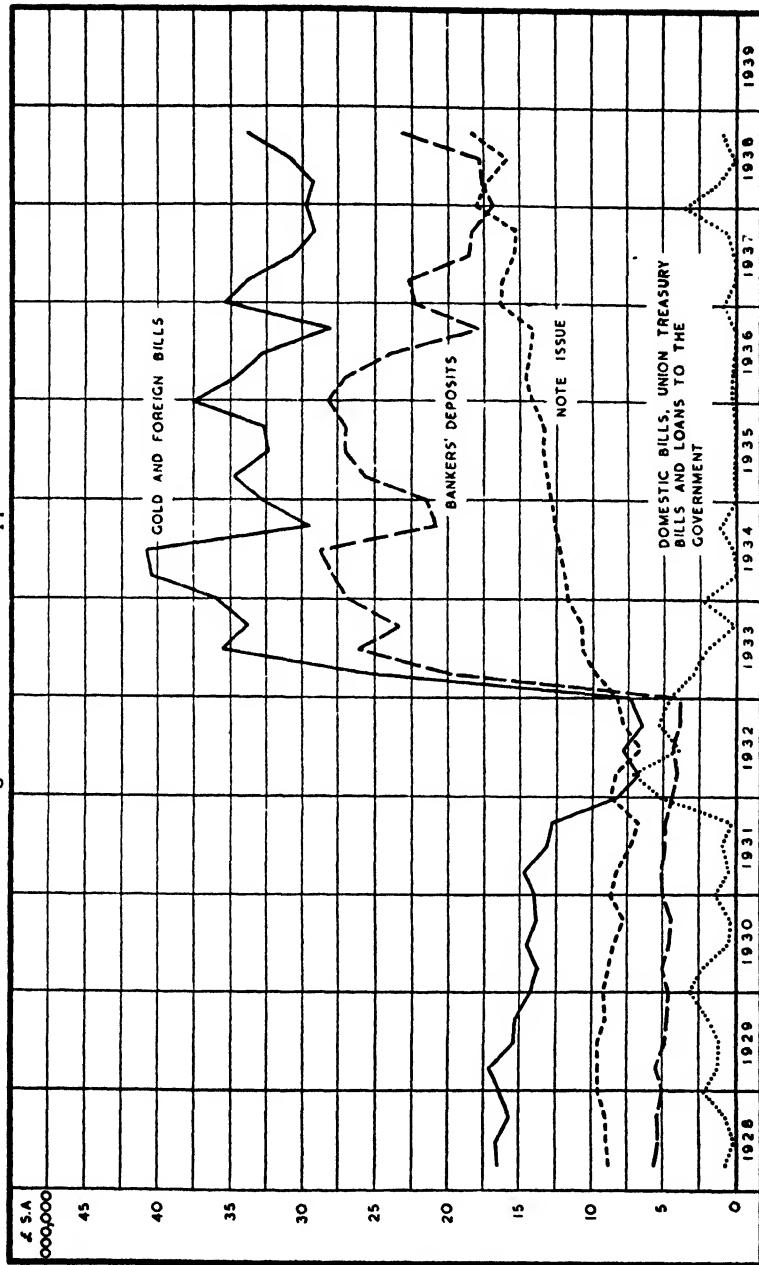
In the period beginning in 1933 the demand for central bank accommodation practically disappeared, and the volume of central bank credit diminished quickly. It only showed one more substantial movement when, at the end of 1937, it rose to a temporary peak. This was not, however, because local credit conditions had become stringent, but concerned government finance.

The striking change between this period and the last is revealed in the leap taken by the Bank's foreign assets and, as an accompaniment, by the reserve-deposits of the commercial banks. It is in these graphs that the full effect of the inflow of short term funds and the improvement in the current trading position is most clearly

¹⁰As explained above, a favourable balance of payments, which increases the foreign assets of the Reserve Bank, automatically increases the commercial banks' deposit liabilities to the public and their reserve-deposits in the central bank. Conversely, with an unfavourable balance the commercial banks will be purchasing foreign assets from the central bank at the expense of their reserve-deposits.

SOUTH AFRICAN RESERVE BANK, 1928-38

Figures in Table vii in the Appendix



seen. The peak of the accumulation of foreign assets was reached in 1934. By that time the South African economy was well out of depression; incomes had risen and imports, following in the steps of exports, had jumped practically to double their 1932 figure. Subsequently, with imports continuing to rise and the balance of trade becoming increasingly unfavourable, the foreign assets of the Reserve Bank fell away. They might have risen again in 1935-6 on the strength of another jump in the price of gold and the value of gold exports, but for the Union Government's use of the accumulating foreign assets to repay debt in London.

With the Reserve Bank's foreign assets falling away from their 1934 peak it was natural that the commercial banks' reserve deposits should fall similarly. Actually, however, the latter's rate of decline was greater, because the rising volume of internal trade and incomes required a larger note circulation. The commercial banks had to withdraw, in the form of notes for public distribution, some of their deposits in the Reserve Bank.

Concluding Comments. Central banks are nowadays expected to play some part in eliminating the cyclical movement of business. The part played by the central bank in South Africa has recently been described as follows:

When the South African Reserve Bank, the first of the Dominion Central Banks, was established, great hopes were entertained that it would be able to exercise effective control over credit conditions and industrial activity. It has so far failed to achieve this purpose, largely because of the fluctuations in . . . long term capital movements. The short term credit situation is similarly affected. The two Imperial Banks which dominate the commercial banking system are not the only sources of short term credit for either the Stock Exchange or commercial enterprise in the Union, both of which at times draw liberally on private sources abroad. Owing to its great dependence on the flow of capital from abroad, the Union is thus very greatly affected by financial conditions overseas, which largely determine its monetary policy.¹¹

Nevertheless the Reserve Bank has been by no means impotent. Its power to create credit has from time to time alleviated the local situation. To this the experiences of 1929 and 1931 bear witness. After 1933 its power in this regard was useless, for the situation demanded restriction rather than expansion, and the central bank had already withdrawn all the credit it had previously extended.

¹¹S. Herbert Frankel, *Capital Investment in Africa* (Oxford, 1938), p. 76.

Thenceforth its influence on the credit situation was advisory. No doubt, as adviser and financial agent of the Government, it played some part in the redemption of London debt and the associated issue of securities in the Union. These operations had the threefold effect of reducing the reserves and liquidity of the South African banking system, relieving a shortage of high grade securities in the Union, and diminishing the foreign indebtedness and possibly the future exchange difficulties of the country.¹²

All these operations in the local capital market and in the field of government finance had their influence upon the course of events; but far more important was the policy in regard to the foreign exchange rate. Here the Bank's advisory influence was probably not as weighty as on other matters because exchange rate policy became a matter of political, even of racial, controversy. The Nationalist party, with its Republican ideals and its conservative, Africaans-speaking section, was naturally anxious to steer an independent course, untrammelled by imperial influences; it preferred gold to sterling.¹³ Only a split within its own ranks, which arose from the acute depression entailed by maintaining the gold standard in 1932, drove it from the policy. Be that as it may, it is now clear that the appreciation of the South African pound was a very heavy burden for the economy to bear. On the other hand, when parity with sterling was regained and the price of gold rose, the effect on the whole community was phenomenal. In purest theory the effect may be regarded as "short run," for it will be eliminated in the long run when the whole of the cost and wage structure of the country has adjusted itself upward in harmony with the raised price of gold. It has been suggested in responsible circles, however, that the "run" will be sufficiently long to double the life of the mining industry; and this does not seem, on the face of it, improbable, so great is the volume of marginal ore bodies and so sluggish the movements of

¹²"The way in which the Government has timed its financial operations so as to prevent fluctuations in the banks' cash reserves is striking, and it would appear that those in charge of the operations have either been very lucky or very skilful" (*Economist*, London, Banking Supplement, Oct. 15, 1938, p. 17).

¹³A writer in the *Round Table*, breaking into metaphor, explained that the retention of gold provided the Nationalist Government with a "magnificent opportunity for demonstrating that South Africa is no mere economic satellite of Great Britain, but a fully fledged planet in the world system" (vol. XXII, 1931-2, p. 188).

prices and wages in the economy of modern South Africa with its many monopolistic organizations and its widespread government regulation.¹⁴

(2) CANADA, 1929-39

*Balances of Payments.*¹⁵ An accompanying table shows the more important items in the Canadian balances of payments for the years 1927-38. Its most notable feature is a credit balance on current account of \$976 millions in the last six years. Apparently rather more than half of this (\$551 millions) has been devoted to the retirement of Canadian securities held abroad.

Several factors have contributed to the development of current surpluses. The balance on tourists' account has been far more important than in other Dominions; the rise in the price of gold with the consequent expansion of the country's mining industry has also contributed substantially.¹⁶ Most significant of all, the rising value of exports has not, as Chapter xv explained, induced a corresponding rise in the national income and imports; so that the favourable balance of merchandise trade has continued at a high level.

Exchange Difficulties. According to the analysis of Chapters

¹⁴"Nothing has changed so little in South Africa as the black man's rate of pay," says an "eminent South African authoress" quoted by S. Herbert Frankel, *Capital Investment in Africa*, p. 83. The Chamber of Mines sets the pay. Nor are the white man's wages largely regulated by trade union agreements, subject to rapid change. Reporting adversely on a request of the Miners' Union for increased wages and benefits, the Gold Producers' Committee pointed out that it was in the interests of the mines, and thus of the country, that the favourable effects of the gold premium should not be wiped out by raised costs. See the editorial in the *South African Mining and Engineering Journal*, vol. XLVI, part I, July 20, 1935, p. 621. See also *Reports of the Bank for International Settlements*, 1938, p. 38, and 1939, p. 56. In regard to the sluggishness of retail prices, see C. S. Richards, "Prices and the 'Cost of Living' in South Africa" (*South African Journal of Economics*, vol. V, pp. 423-40). As for wholesale price movements see Schumann, *Structural Changes and Business Cycles in South Africa* (London, 1938), pp. 108-9, 175, 232, etc. For a general summary of state regulation see F. J. van Biljon, *State Interference in South Africa* (London, 1939).

¹⁵See [H. Marshall], *The Canadian Balance of International Payments: A Study of Methods and Results* (Dominion Bureau of Statistics, Ottawa, 1939).

¹⁶For details of the trend of gold movements see the *Statistical Summary of the Bank of Canada*, March, 1939, pp. 42-4, and June, 1939, p. 101. For tourist movements see the issue of May, 1939, p. 84. For the disposal of newly mined gold see also the Midland Bank's *Monthly Review*, Feb.-March, 1939.

CANADIAN BALANCES OF INTERNATIONAL PAYMENTS, 1927-38

Net Receipts or Credits: *Net Payments or Debits**Dominion Bureau of Statistics**

\$000,000

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938†
CURRENT ACCOUNT												
Merchandise...	139	131	131	122	17	74	147	148	193	322	213	181
Non-monetary gold.....	11	13	36	22	43	61	79	110	117	131	145	157
Tourist trade ..	130	168	188	179	174	155	66	82	119	141	170	145
Interest and dividends....	211	221	260	289	280	262	224	212	209	234	246	242
Freight.....	12	19	39	32	25	28	22	28	14	18	26	20
Miscellaneous services.....	8	16	28	25	21	34	34	26	29	34	39	35
Balance on Current Account	49	55	234	267	125	35	12	75	177	309	218	185
CAPITAL ACCOUNT												
New issues or retirements of Canadian securities.....	141	7	133	290	9	1	26	58	154	164	88	60
Other security transactions .	184	188	105	13	24	16	51	9	51	8	5	27
Other capital movements..	39	99	126	38	62	6	51	67	70	98	106	127
Net capital movement.....	4	82	154	315	47	11	27	116	174	254	199	160
MONETARY GOLD.	15	77	38	20	47	13	8	....	....	....	....	....
BALANCING ITEM†	59	50	42	29	31	34	7	41	3	55	19	25

*Reproduced from the *Statistical Summary of the Bank of Canada*, Feb. 1939, p. 34.

†Preliminary.

‡This balancing item measures unavoidable errors and omissions in current and capital account.

xiv and xv, Canada might be expected to be a country specially susceptible to exchange difficulties. The degree of industrial complexity is considerable, leaving room for many a slip between the cup of exports and the lip of imports. Foreign indebtedness has been heavy, partly because, as in other Dominions, much capital has been raised or guaranteed abroad by Governments and partly because so much corporate capital has been raised abroad by the issue of bonds instead of shares. The local capital market is quite well enough developed to permit considerable spontaneous movements of local incomes. On all these accounts exchange difficulties might arise.

On the other hand, as we have just seen, Canada has become on balance a capital exporting country and recently this export has reached large figures. At the end of Chapter xiv it was suggested that when a country turned into a net capital exporter its worst foreign exchange difficulties should be over because it would no longer be dependent upon capital imports subject to sudden stoppage and because of the relative ease with which its own capital exports could normally be controlled. This is, indeed, the case in countries where capital exporting is well established; for example, British authorities have from time to time imposed some sort of embargo on long term issues through the regular banking houses when the position of the foreign exchange rate seemed precarious; and much of the history of "bank rate" apparently concerns the regulation of capital efflux (long and short) in accordance with the condition of gold reserves and the exchange rate. But in Canada no regular machinery has been developed to handle the outflow. The greater part has recently been devoted to the retirement of outstanding Canadian securities, and the remainder has taken a large variety of forms. In order to illustrate the complexity of the movement two tables are presented on pp. 411 and 412, one showing Canada's aggregate international capital account for the year 1937, and the other showing the variety of the security movements across Canada's frontiers in the same year.

These tables indicate the potential difficulties of the Bank of Canada in controlling the foreign exchange rate. Many of the "normal" international capital movements are subject to hastening or delay in response to the present and expected position of the foreign exchange rate and to the comparative level of security prices and interest rates at home and abroad; and it is the time element,

the problem of lags and leads, which we have seen to be basic to the Dominions' foreign exchange problems. If a policy of the authorities in maintaining or depressing the rate was considered undesirable or indefensible by those responsible for the shift of capital a very

CANADIAN INTERNATIONAL TRANSACTIONS IN OUTSTANDING SECURITIES, 1937

Dominion Bureau of Statistics*

\$000,000

Calendar year totals	Total net sales or purchases	UNITED STATES		UNITED KINGDOM		OTHER COUNTRIES		Total sales	Total purchases
		Sales to	Purchases from	Sales to	Purchases from	Sales to	Purchases from		
Canadian bonds.	4.3	65.2	74.0	13.7	12.1	5.7	2.7	84.6	88.8
United States bonds.....	2.2	21.0	23.3	0.2	0.1	0.1	.....	21.3	23.5
United Kingdom bonds.....	2.7	0.1	0.1	3.8	1.2	0.1	0.1	4.1	1.4
Other countries' bonds.....	0.5	4.1	4.3	0.7	0.6	0.7	0.1	5.5	5.0
Unspecified bonds	5.3	22.3	20.6	5.2	1.4	0.2	0.4	27.8	22.4
Total bonds	2.1	112.6	122.4	23.7	15.4	6.9	3.3	143.2	141.1
Common and preferred shares									
Canadian.....	5.3	76.6	98.2	70.7	61.6	16.7	9.5	164.0	169.3
United States..	3.9	185.8	190.9	1.7	0.6	0.4	0.3	187.9	191.8
United Kingdom.....	0.1	0.1	0.4	1.0	0.6	.....	.....	1.2	1.0
Other countries.....	0.6	0.6	.....	.....	.....	.....	.....	0.6	0.6
Total shares.....	9.1	263.1	290.1	73.4	62.8	17.1	9.8	353.7	362.7
Short term securities†.....	0.9	0.1	0.2	8.3	7.3	.....	.....	8.4	7.5
Other securities ..	1.4	0.6	.....	0.3	.....	0.5	.....	1.5	.....
Total securities ..	4.8	376.4	412.7	105.7	85.6	24.5	13.1	506.6	511.4

*Reproduced from the *Statistical Summary of the Bank of Canada*, Feb., 1938, p. 25.

†Originally issued for a term of one year or less.

CANADIAN BALANCE OF PAYMENTS ON CAPITAL ACCOUNT, 1937

*Dominion Bureau of Statistics**

\$000,000

	Exports or credits	Imports or debits	Net credit net debit
New issues placed outside Canada (net proceeds)	89.5	..	89.5
Retirements of securities held outside Canada .....	..	177.9	177.9
Sales and purchases of outstanding securities	506.6	511.4	4.8
Insurance transactions.....	24.0	34.0	10.0
Net international direct investments.....	..	82.6	82.6
Estimated change in net assets of Canadian banks outside Canada.....	..	13.0	13.0
TOTAL CAPITAL ACCOUNT.....	620.1	818.9	198.8

*Reproduced from the *Statistical Summary of the Bank of Canada*, Dec., 1938, p. 199.

large volume of selling or buying would quickly develop. Amongst the "normal" movements prone to be hastened or delayed are the repayment of debts and the movement of accumulated profits and other liquid assets by the numerous Canadian branches of American firms. (See item in above table: "Net International Direct Investments.") In addition to the possibility of hastening or delaying such normal movements there is the possibility of irregular movements for speculation and investment. These usually take the form of buying and selling existing securities. The table on p. 411 shows that in 1937 there was a total international movement of securities of more than \$1,000 millions with a balance in one direction of less than \$5 millions. While 1937 was a year of considerable prosperity and activity in the security markets of both Canada and the United States, making the example extreme, it is usual for a large aggregate of dealings to result in a fairly small balance. But this is not necessarily the case; and under unfavourable circumstances a very large unfavourable movement could quickly develop.¹⁷

¹⁷Theoretically, and doubtless also in practice, some types of security are more likely to move as a result of disturbances to confidence than others. Different disturbances will produce different movements. See Marshall, *Canadian Balance of International Payments*, chap. XVIII.

As long as the wishes of the authorities conform to the expectations of the individuals actually or potentially interested in capital movements, these movements tend to act as an automatic "exchange equalization account." The efflux of capital, unless prompted by some unsettlement of confidence, tends to be checked by a fall of the Canadian exchange; it is hastened by a rise. For instance, following the major depreciation of 1931, most branch plants were unwilling to remit funds (on account of profits, current purchases, etc.) to the United States when the premium reached 4 or 5 per cent. The presumption was widespread that dollar-for-dollar was the proper relationship between the Canadian and American currencies, and that the exchange rate would always return to it after temporary aberrations. Nowadays branch plant managers and others probably take a more intelligent attitude towards the probable course of the exchange, but the result is similarly to mitigate short term movements of the rate. Another factor which may be influential both in regard to short and longer term movements is the willingness to redeem debt. Had there been a substantial premium on the American dollar during the period 1934-9 far fewer Canadian debtors would have repaid debt in the United States.¹⁸ The extent to which exchange dealings involve a corporation or Government showing a loss or a deficit upon the balance sheet or the profit-and-loss account is probably an important consideration: actions which are really economic in view of future prospects may not be undertaken if, according to the canons of accounting, they involve setting on record the results of some untoward event in the past.

Dualism of Canadian Exchange Relationships. Unlike the other Dominions, whose international financial dealings are focussed upon a single outside currency, Canada's are focussed upon two—the pound sterling and the American dollar. The great bulk of the actual dealings of the Canadian banks, operating on behalf of the Canadian public, are with New York; but this is a result of prox-

¹⁸*Ibid.*, chap. xvii; also the evidence of the Governor of the Bank of Canada to the House of Commons Committee on Banking and Commerce, 1939, pp. 560-2. He suggested (p. 624) that if interest rates in Canada had not been kept down by the central bank's operations the direct incentive (arising from interest rates) to redeem debt abroad while floating refunding issues in Canada would have been reduced; but in that case the Canadian dollar might well have risen to a premium above the American, and this would have replaced interest rates as a factor making repayment of American debt worth while.

mity and of the fact that Toronto, Montreal, and New York are in the same time zone. Much of the Canadian banks' business in New York, especially their selling, is in sterling.

What is the relative importance to Canada of the two currencies? A rough idea of the extent of exchange dealings on account of trade can be obtained from a glance at the following figures:

CANADIAN TRADE IN 1937
(Commodity Trade excluding Gold)

\$000,000

Imports from U.K.....	147:	from U.S.A.....	491:	from elsewhere.....	171
Exports to U.K.....	402:	to U.S.A.....	360:	to elsewhere.....	235

Total trade with U.K..	549:	with U.S.A.....	851:	with elsewhere....	408
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These figures do not by any means tell the whole story of the interest of Canadians on trade account in the two major currencies. Allowance would have to be made for trade with countries in the British Empire (\$193 millions in 1937) and the sterling bloc, and for trade with those few countries which operate in effect on a U.S. dollar-exchange standard; for re-exports and for imports whose real country of origin is not accurately represented in the trade statistics. And in order to estimate the total relative importance of the two currencies, account would have to be taken of the tourist movement, of capital transactions, and other less important items in the balance of payments. The ebb and flow of speculative and semi-speculative funds between Canada and the United States is sometimes of very great proportions, as a table above indicated. Tourist transactions, which are nowadays of great importance, are also very largely with the United States. In 1937 the estimated expenditure of tourists in Canada was \$295 millions, and of Canadians abroad was \$124 millions.

What is likely to be the behaviour of a minor currency having interrelations with two major ones when the major ones fluctuate in terms of each other? The rough answer, which is probably generally acceptable, is that the minor currency will move to (or remain in) an "intermediate" position. But it is not always fully understood how this may be expected to occur.

It can be shown that, if the minor currency temporarily remains at parity with one of the major currencies, forces will be set at work

pulling it some way in the direction of the other. Let the three countries be A (whose currency, a , appreciates), D (whose currency, d , depreciates), and M the minor country with currency units of m . Suppose that the movement between d and a results from a new flow of lending from D to A . If the minor currency (m) temporarily retains parity with the appreciating major currency (a) it also appreciates in terms of the other one (d). In M there will be a stimulus to import more from D (the fall in d will mean that the supply schedules of M 's imports from D will have fallen in terms of m); there will also be a tendency to export less to D (the fall in d will mean that the demand schedules for M 's exports to D will have fallen in terms of m). Thus, with failing exports and rising imports, M 's trade balance with D becomes less favourable; in M the amounts required of d increase while the supplies decrease. Then m begins to fall in terms of d . It will also fall (as a result of arbitrage transactions if for no other reason) in terms of a . As m falls in terms of a , M 's trade balance with A improves. Equilibrium (of a sort) will be reached when m has fallen sufficiently far away from a and towards d so that the unfavourable change in M 's trade balance with D just equals its favourable change in trade balance with A . And this will normally be when m has in some measure depreciated in terms of a and appreciated in terms of d . This is what is meant by saying that m will, after the fluctuation of one major currency in terms of the other, occupy an "intermediate" position.¹⁹ The same

¹⁹So much for the general exchange rate situation. As for the trade position it is fundamentally this: To the extent of D 's lending to A there arises a favourable movement of D 's trade balance and an equal unfavourable movement of A 's trade balance. The changes are not, however, all in their balances with each other, but in part in their balances with M . The existence of M thus provides an extra piece of machinery, extra alternative opportunities, through which the normal adjustment of trade balances to capital movements comes about. The existence of M will facilitate trade adjustments to a given volume of lending from D to A : d will depreciate less in terms of a than if m did not exist.

The question, To which currency is m likely to cling the more closely?, may be supplied with a rough answer. It will tend to be relatively stable in terms of the currency of that major country with which its trading and other relations (demands and supplies) are most elastic. In the case of the Canadian and American dollars, we have seen that any sharp movement of the exchange produces short run shifts of capital which check the exchange movement. One might hazard a guess that the long run elasticities of Canadian trade and financial relations with the United States are also greater than the elasticities of relations with Great

result would have been reached if our theoretical analysis had started with the assumption that m temporarily depreciated the whole way with d , instead of appreciating with a .²⁰

It must not be inferred that the economic and financial position of the minor country is, on balance, unaffected by changes which lead its exchange rate into an intermediate position; that it necessarily makes on the roundabouts what it loses on the swings. Whether the change in the exchange relationship between the two major currencies will be beneficial or detrimental will depend upon the nature as well as the extent of the minor country's relationship with both of them. Most students of the Canadian exchange position would probably agree that the movements of 1931-2 were detrimental to Canada. At that time the price of sterling fell, and it was with Great Britain that Canada's balance of trade was normally most favourable. At the same time the price of the American dollar rose; and it was in terms of that currency that Canada's foreign debts were chiefly contracted. In order to service these debts in the United States, Canada customarily sells sterling (acquired from the favourable balance with Great Britain) in return for U.S. dollars; but when the value of sterling fell in terms of American dollars, and a compensating rise of commodity prices in Great Britain failed to occur, Canada's favourable balance with Britain would not go so far to meet the American debts. Conversely, it would probably be agreed that the movement of 1933, with sterling appreciating and the American dollar depreciating, was favourable to Canada.

While there is no doubt that some changes in the sterling-U.S. dollar exchanges favour and others damage Canada, the examples given in the preceding paragraph must not be taken entirely at their

Britain. The corollary of this would be that the Canadian dollar would generally cling more closely to the American dollar than to sterling over long periods.

It might be expected that the minor currency would cling most closely to the currency of the country with which the minor country had the greatest commercial and financial relations. Generally this will be true; but it is because the greater the variety and complexity of trade the more likely is it that some items will be elastic. The elasticity of the whole is the elasticity of its most elastic parts. In addition, if trade in either direction is small, contraction will soon bring it to zero; and however elastic its previous contraction has been, at zero it becomes completely inelastic. Thus the minor currency will usually cling most closely to the currency of the major country with which the volume of transactions is greatest.

²⁰Cf. empirical results reached by G. E. Jackson, *Monthly Review of the Bank of Nova Scotia*, Dec., 1933.

face value. The movements of the major exchanges in 1931-2 were reflections of the fact that Britain had, in a measure, been living beyond her international income and that a condition of international financial panic prevailed. Both circumstances were essentially unfavourable to the Canadian economy; and they were reflected in the failure of British prices to rise as much as might otherwise have been expected. On the other hand, the movement of the major exchanges in 1933 reflected the fact that, although economic conditions were reviving in Great Britain, Mr. Roosevelt intended to make them revive more rapidly in the United States; a situation full of favourable possibilities—and actualities—for Canada.

Course of the Canadian Exchanges, 1929-39. The Canadian dollar has generally occupied the intermediate position, which the preceding paragraphs have indicated to be natural, when the pound sterling and the American dollar have fluctuated in terms of each other. A graph on p. 419 shows the changing prices of sterling and American dollars in terms of Canadian currency. For the most part the price of American funds rises sharply when that of sterling falls sharply, and *vice versa*. The coincidence is most marked in the periods September, 1931, to April, 1932, and again from February to November, 1933.

From 1935 onwards it seems clear that the price of the American dollar has been a good deal steadier than the price of sterling. (The chart actually does less than justice to this tendency because, on its scales, a movement of 1 cent in the former price is plotted as equalling 8 cents in the latter instead of about 4.86. The purpose of this choice of scales appears in the next paragraph.) The relative stability of the price of the American dollar can no doubt be largely explained in terms of the various capital movements which, as already explained, have acted as a sort of "exchange equalization fund." In addition, amongst the world's currencies, the Canadian dollar has naturally tended since 1935 to move with the American dollar, while the pound sterling has moved speculatively with those of the Continent reflecting changes in the political outlook in Europe.

A third curve appears on the chart, showing changes in the combined price of £1 stg. + \$8 U.S. Eight to one was taken as a very rough weighting of the dealings on the Canadian exchange market, according to the information given above and making some allowance for the fact that the ebb and flow of speculative funds was

not of the same fundamental significance as an equal volume of trade, tourist expenditures, and so forth. The curve thus illustrates very roughly what Canadians are paying and getting for their current dealings in sterling and U.S. dollars together. It shows in a rough way movements in the value of the Canadian dollar in terms of the two major currencies combined. (The curve is so constructed that a vertical movement in it is equal to the sum of the contemporary movements in two lower ones.) Important movements which have their origin in Canada, or in Canada's relationships to either of the major countries, are reflected in it; and a lot of sporadic movements which could not so easily be interpreted are reflected in it as well. It clearly shows, however, such events as: (i) the weakness of the Canadian dollar in 1929 which arose from a failing trade position and an outflow of funds to the New York market; (ii) the temporary strength of the Canadian dollar in 1930, chiefly caused by the largest volume of foreign borrowing for any year in the country's history since 1914; (iii) the acute weakness which developed in 1931 in the balance of payments; (iv) the currency's gathering strength through 1933 and 1934; and lastly (v) at the end of the period, the strength of the Canadian dollar in 1938 and early 1939 when a considerable flow of British and European money was coming into the country.²¹

Policy of the Bank of Canada. The Governor of the Bank of Canada has made it clear that, in regard to exchange rates, the Bank will not adopt a positive policy unless instructed by the Government of the day. On so important a matter, ultimate responsibility must, it is said, rest with the Government. And the Government has been willing to allow the Canadian dollar to find its own level.²² Suspicions have been aroused and statements made to the effect that the Bank has been responsible in 1938 and 1939

²¹For some details see the *Bulletin* issued by A. E. Ames & Co., Toronto, May, 1939, "The Flow of Foreign Funds to Canada."

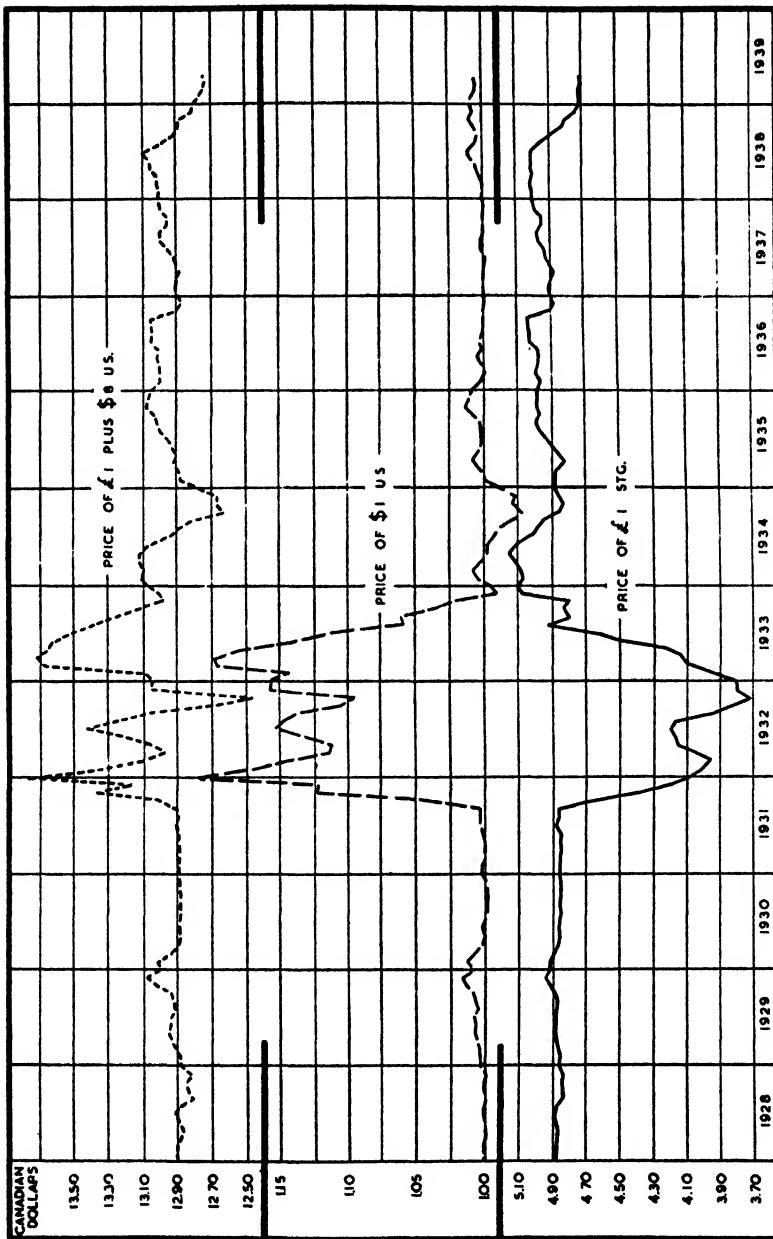
²²This has been generally true ever since 1929, except that the Conservative Government of 1930-5 put up tariffs with the partial object of improving the trade balance and reducing the cost of servicing debt in New York. It is interesting to contrast the situation in Australia where, after 1931, the Government explicitly entrusted the determination of exchange policy to the Commonwealth Bank. In regard to these and other matters I am indebted to material compiled by F. A. Knox and as yet unpublished.

PRICE OF FOREIGN EXCHANGE IN TERMS OF CANADIAN DOLLARS, 1928-39

Figures in Table viii in the Appendix

CANADIAN EXCHANGE RATE

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for the stability of the Canadian dollar in terms of the American.²³ The Minister of Finance and the Governor of the Bank of Canada have both denied that this was the case.²⁴ Enough has already been said to show that the stability is explicable in terms other than official intervention. In addition, the general stability of the British and American currencies, and thus indirectly of the Canadian, has been promoted by the operations of the British and American exchange funds under the facilities of the Tripartite Agreement of 1936.

The tasks both of choosing and, under unfavourable circumstances, of implementing an exchange policy in Canada are difficult, and it is no wonder that the authorities have been hesitant. The economy is one of considerable complexity and wide variety of economic interest. Positive policies and bold strokes of statesmanship are, under present circumstances, likely to set up or aggravate centrifugal tendencies amongst the various groups, areas, and provinces that make up the country. The Liberal Government, which has been in power almost continuously since the Bank of Canada came into being, has not been noted for rash experimentation. Its laissez-faire policy in regard to the foreign exchange rate has been particularly criticized by those who would have favoured a lower value of the dollar; and suggestions have been made that, with the weakness of sterling which began in the middle of 1938, the Canadian authorities should have driven the Canadian dollar down with it in terms of American dollars. Unless a favourable attitude had existed in the interested sections of business and finance, that is to say in those sections which normally or occasionally move funds in and out of the country, an attempt to drive the Canadian dollar downwards might have involved very large purchases of foreign exchange or gold by the Bank of Canada.

Some accumulation of foreign exchange greater than has in fact occurred might, however, have been desirable. Although Canada's

²³See *Financial Post* (Toronto), Oct. 29, 1938, "Central Bank Credited for Exchange Stability"; also Banking Supplement of the *Economist* (London), Oct. 15, 1938, p. 14, "It is generally accepted among Canadian bankers that the Bank of Canada has been consciously acting as a stabilization fund. The Canadian dollar has been held very close to that of the United States. . . ."

²⁴*House of Commons Debates*, Feb. 16, 1939, p. 1100-1; also evidence by the Governor of the Bank of Canada before the House of Commons Committee on Banking and Commerce, 1939, pp. 23 and 25.

long term foreign indebtedness has been greatly reduced in the years 1933-8, the short term international position of the financial system has by no means been restored to that of ten or twelve years ago. The change is shown in an accompanying table. At the end of 1938 the net short term international assets of the system were less than half the amount eleven years earlier. In the event of a new severe

NET SHORT TERM FOREIGN ASSETS OF CANADIAN BANKING SYSTEM	
	December 31, 1927
Net foreign assets of chartered banks*	\$000,000 293.4
Gold of chartered banks	
In central gold reserves.....	21.2
In Canadian vaults†.....	48.1
Elsewhere.....	28.5
Gold of Dominion Government.....	127.7
(At \$20.67 per oz.)	<hr/>
	518.9
December 31, 1938	
Net foreign assets of chartered banks*	8.7
Foreign exchange of Bank of Canada.....	28.4
Gold of Bank of Canada.....	185.9
(At about \$35 per oz.)	<hr/>
	223.0

*Without deducting liabilities on letters of credit.

†Includes also holdings of subsidiary coin which in Canada usually amount to some \$5 millions.

depression, entailing falling income from exports and difficulty in meeting foreign debts, it seems desirable to have at least as large a reserve of international assets as was available before the last one. Some people would like to employ such a reserve to keep the exchange rate from depreciating; but others, considering exchange depreciation as desirable under the circumstances, would prefer the foreign assets to be employed, if necessary, to make depreciation orderly and successful. Depreciation which takes place in a panicky and uncontrolled fashion is likely to have more harmful effects and less beneficial ones than a movement that is obviously under the authorities' control.²⁵ But whatever use they are ultimately put to, a country like Canada is well advised to build up a large volume of liquid foreign assets at a time when the current foreign exchange position is exceptionally strong.

²⁵See J. S. Allely, "Some Aspects of Exchange Depreciation" (*Canadian Journal of Economics and Political Science*, vol. V, Aug., 1939).

CHAPTER XIX

OBJECTS AND OPERATIONS: CONCLUSION

TWO objects have been held up for central banks, two ends towards which they should work. The first has been the maintenance of stable exchange rates under the mechanism of the gold standard or something like it. The second has been the elimination of cyclical and sporadic movements in the general state of prosperity. The first has been an international ideal; the latter a national one.

Stability of the exchange rate existed for so long in the Dominions before central banks were established that a question arises whether the new institutions were really required in order to achieve it. Stability has indeed been traditional. It was the natural condition of affairs and until very recent times it did not deserve to be called a policy; for nobody devised it or even considered an alternative, and its execution depended, not upon considered government action, but upon the colonial status of the monetary, financial, and economic structures of the countries. In its maintenance the extension and restriction of credit played a part; but general credit policies were the result, not of conscious control, but of contemporary actions by competing financial institutions whose liquid assets in London and New York rose and fell with the general tide of prosperity and recession. Nevertheless as the Dominions gained in maturity, both financially and economically, they left the earlier stages of colonial dependency behind them and developed a will and a way of their own. Where before only the instinct to follow was required in order to keep Dominion financial policies in step with those abroad there now emerged the possibility for, and thus the need for, a conscious decision. To those sponsors of central banking who were internationally or imperially minded, and these included the influential advisers who visited the Dominions from abroad, the object of the new banks was to prevent these countries from breaking step. It was believed that all, leaders and followers alike, would progress faster and farther, by marching in step; while the leading

countries of the world should try to ensure that the group neither ran away into a boom nor lagged into a depression.

But within the Dominions most proponents of monetary management were nationally minded. To them the object of central banking was to mitigate the effects of business fluctuations, and more especially those which had their origin abroad. In short, to this group the object of central banking was to break step whenever the pace set by countries abroad seemed unsuitable.

An attempt to get the best of both policies, national and international, was bound to run into difficulties. National monetary control—that is, the process of getting out of step whenever it seems convenient—cannot get very far while the exchange rate goes unchanged and freedom to deal on the exchange market goes unchallenged. In the Dominions national monetary operations to regulate business conditions are likely to be even more hampered, even less successful, than in more mature, more self-sufficient countries. The fundamental obstacles lie in the dependent positions which the Dominions still occupy, economically and financially, and the extent to which their economies are still dominated by the vagaries of the weather, the intermittent discoveries of virgin resources, and the chance invention of techniques appropriate for their exploitation. Any monetary policy which is not, in effect, swimming with the stream of events abroad is liable to encounter special problems on account of the unresponsiveness of the economic and financial systems to monetary controls and on account of difficulties in the foreign exchange markets. This is true of such fiscal policies as public works and pump priming as remedies for depression. It is even more true of accepted central banking techniques, such as open market operations or movements of bank rate, because these require the environment of a well-developed capital market. Even variations in the legal minimum reserves which commercial banks have to hold in the central bank, although at first sight a promising method of credit control in the Dominions, seem likely to be ineffective.

Both this and other more time-honoured techniques of central banking are wanting because they are based on the assumption that the commercial banks' cash reserves held locally are regarded as the primary basis of credit and are always kept down to a practicable minimum such as 10 per cent. In more mature countries this

assumption has generally been valid, and older central banks have been accustomed to regulate credit conditions by operating upon the banks' cash reserves. In the Dominions other than Canada, however, the assumption has been invalid. In the absence of local capital markets of sufficient breadth the commercial banks have been unable to lend out and call in cash reserves from day to day and thus unable to develop any stable notion of proper cash proportions; on the other hand, they have always been accustomed to regard changes in their funds in London, rather than in their local cash position, as indications of the credit policies which they ought to pursue. Until the end of the nineteen-twenties the Canadian bankers were also guided by their funds in London and New York, although their proximity to New York permitted them to ship gold to and fro with little cost and thus to build up the tradition of a steady cash reserve ratio.

However, the Dominions are gradually increasing their independence, economically and financially. The emergence of individual pounds distinct from sterling, and of the Canadian dollar distinct from the American, is evidence of this. Once the distinction was recognized a new and attractive mode of monetary management appeared: the conscious manipulation of the foreign exchange rate, with or without support from internal credit policies. The apparent advantage of exchange flexibility is that it seems to go to the root of cyclical fluctuations in the Dominions. It seems to hold the possibility of altering in the desired way the value of the countries' exports and of the liquid assets of the banking systems in markets abroad. To the bolder, more venturesome spirits it is therefore full of attraction. On the other hand, its disadvantages lie in the uncertain behaviour of commodity and capital markets, at home and abroad, in the face of deliberate exchange movements, actual or anticipated. Such considerations as these, combined with the instinct for conservatism and antipathy to experiment which, perhaps fortunately, pervade financial circles, have been sufficient to relegate exchange flexibility into the role of an emergency measure only.

To many of the foregoing generalizations Canada presents exceptions. The exchange rate has not for some years (1931-9) been stabilized in terms of either sterling or the American dollar; the banks have maintained a very steady cash reserve proportion;

and the central bank has practised open market operations with almost unqualified success. These exceptions are to be explained partly by the relative maturity of Canada amongst the Dominions and more fundamentally by its proximity to the United States. This proximity has, over a long period, permitted Canadian banks to develop stable reserve habits. It has also encouraged the development of certain departments of the capital market. It has also provided a second focus, additional to Great Britain, for external economic and financial relationships. Thus the Canadian dollar in the nineteen-thirties assumed on foreign exchange markets an intermediate position between the two major currencies; a position whose independence may have been more apparent than real. Nevertheless, with both important exchange relationships fluctuating, the Canadian banks have been dissuaded from their dependence upon capital markets abroad as repositories of liquid funds; and their stable habits regarding cash ratios, together with the increasing independence and maturity of the local financial structure, have facilitated central banking control by accepted means. The fact that the Canadian economy, in the latter nineteen-thirties, assumed a position of exporting and redeeming capital instead of importing it has furthered the independence of the financial system and facilitated the central bank's control.

The South African banks, like the Canadian, have gone through a period in which the value of assets held abroad declined sharply. They have consequently given up their dependence on London funds as a reliable source of liquidity to cover obligations in the Union. But the South African market has not been broad enough to permit the central bank to undertake open market operations nor to permit the commercial banks to develop stable habits regarding their local cash ratios.

Thus, if any sort of credit control was to be instituted in the Dominions other than Canada, it became clear that methods other than those accepted in orthodox central banking circles would have to be employed. The intervention in financial affairs would have to be more direct than mere operations on the local cash reserves of the commercial banks. The new central bank would have to undertake a certain amount of competition with the existing institutions, taking away more of their business and more of their prerogatives than had been originally anticipated. Moreover, and this was true of Canada as well, the new government institution would have to

assist in mitigating the plight in which a large section of the Dominions' debtors were to be found from time to time.

The introduction of central banking, although in some cases and some respects premature, is increasing the independence of the local capital markets; for it supplies a new source of local liquidity to replace that obtained in the past by reliance on markets abroad. Fundamentally, the nature of the local markets depends upon the countries' economic structures; but this is not to deny that financial innovations may hasten or impede the attainment of financial maturity. Not only will the existence and ordinary operations of the central banks further this condition, but the banks may take positive steps to broaden the markets. If these steps follow the old-fashioned path of encouraging the use of commercial bills instead of ordinary overdrafts and loans not much progress is to be expected. More may come from the introduction of treasury bills and the encouragement of a market in them. These innovations may, under unfavourable circumstances, actually diminish the control of the central banks; for Governments, ignoring the advice of the banks, may issue the volume of bills that happens to suit fiscal necessity. On the other hand, if the Governments are amenable, if the commercial banks accept treasury bills as a normal part of their liquid assets, and if something of a market in bills develops, these securities offer the most hope for the extension of accepted central banking in the Dominions of the southern hemisphere. Whether or not central banking will, there and in Canada, extend along more or less accepted lines or whether it will extend into increasingly direct forms of intervention in financial affairs, will depend upon the course of political developments in the various countries.

It is quite possible that the Dominion central banks may make their most important contributions, not by bold strokes of monetary policy nor by the spectacular use of the various central banking devices which have been examined here, but rather by performing a variety of more lowly and menial tasks, regular and irregular. They have it in their power to supplement and facilitate the work of a number of government departments with which their business is connected. Chief among these are treasury departments and government statistical bureaus. The assistance which the central banks can give is increased by the fact that they are not themselves government departments, but have something of the status of administrative boards or commissions outside the necessary routine

regulations and requirements of civil services. The fact that the banks are in close daily touch with financial events increases the value of their knowledge and advice. They may strengthen, in no clearly definable way, the whole financial and fiscal sector of government; and that, in these days of growing demands upon the state, is a service not to be belittled.

Finally, much may be accomplished by direct personal influence amongst the commercial banks and other financial institutions. The extent of this influence depends chiefly upon the particular personalities involved; but some of the Dominion central banks are in a more favourable position than others. In Canada, where circumstances permit the Bank to be effective without invading many of the preserves of the commercial banks, it is likely to stir up less hostility than elsewhere and is thus in a position to be more influential. It may be able to persuade the commercial banks to change the volume and direction of their loans; it may be able to persuade the stock exchanges to alter the margins required for speculative dealings; and so forth. In other Dominions, too, powers of persuasion are of growing importance; but the quandary arises how far to press competitive operations or how far to sacrifice such direct financial control as may be gained from competition with other financial institutions in order to foster the influence which arises from their favour. In all the Dominions, however, the influence of the central banks is facilitated, or may in the long run be facilitated, by the high degree of centralization of the existing financial structure and by the fewness of the people holding key posts. Thus, as in England but in contrast to the United States and some other countries, the central banks in the Dominions are in a position to exert persuasive influence quickly and effectively.

And so this book concludes its finale on the same note that opened the prelude: stressing the dominance of the personal element in the formative years of these new institutions of state control. As the Preface pointed out, a study of personalities cannot be undertaken here. Some day, no doubt, the story of the early years of the Dominion central banks will be retold, enriched by the light of personal documents and memoirs. But until that time comes this general account may serve to show how the financial systems of the Dominions have developed from colonial to dominion status, and to explain the ways in which state intervention, in the form of accepted central banking and unorthodox departures, has guided and hastened the development.



APPENDIX

TABLE I

BANK OF CANADA AND CANADIAN CHARTERED BANKS, 1935-9*
 \$ 000,000

	Bank of Canada, securities held†	Chartered banks, cash in Canada‡	Chartered banks, deposits payable in Canadian currency§	Percentage which cash bears to deposits	Chartered bank loans||	Chartered banks, securities held**
1935						
March.....	152.1	201	2,034	9.9	1,045	970
April.....	140.1	207	2,117	9.8	1,062	1,000
May.....	139.9	198	2,094	9.5	1,053	1,005
June.....	150.4	201	2,082	9.7	1,039	1,018
July.....	95.2	203	2,063	9.8	1,015	1,031
August....	106.5	223	2,075	10.7	1,032	1,041
September.	104.2	217	2,141	10.1	1,041	1,103
October....	106.8	230	2,183	10.5	1,047	1,116
November ..	120.6	223	2,206	10.1	1,076	1,137
December..	114.3	222	2,208	10.1	1,028	1,155
1936						
January....	105.7	213	2,162	9.9	951	1,207
February ..	108.7	218	2,177	10.0	947	1,265
March.....	110.8	221	2,234	9.9	941	1,315
April.....	110.9	222	2,262	9.8	944	1,314
May.....	110.8	219	2,226	9.8	915	1,345
June.....	111.7	224	2,244	10.0	868	1,368

*Figures for the last day of each month, taken from the published returns of the banks.

†These are probably largely Dominion government issues. Until September, 1936, they were entirely so. At that date the Bank statement ceased to differentiate between Dominion and provincial securities. In the period July, 1937-June, 1938, the figures included foreign securities to an amount averaging about \$12 millions.

‡Bank of Canada notes and deposits.

§Figures from *Statistical Summary of the Bank of Canada*.

||Including loans to industry, business, farmers, financial houses, municipalities, and provincial Governments.

**About four-fifths of these are Dominion and provincial government securities. The remainder includes mostly Canadian municipal securities and also some foreign government securities. Nearly half of the Dominion and provincial securities are of less than two years' maturity.

TABLE I—*Continued*

	Bank of Canada, securities held†	Chartered banks, cash in Canada‡	Chartered banks, payable in Canadian currency§	Percentage which bears to deposits	Chartered bank loans||	Chartered banks, securities held**
1936 (Cont'd)						
July.....	111.9	222	2,210	10.0	860	1,357
August....	110.7	219	2,209	9.9	866	1,355
September.	138.1	221	2,301	9.6	912	1,380
October....	153.4	227	2,291	9.9	925	1,363
November ..	169.2	259	2,300	11.2	917	1,316
December..	160.3	235	2,323	10.1	904	1,384
1937						
January....	159.8	241	2,283	10.6	915	1,412
February ..	156.9	233	2,319	10.1	924	1,422
March.....	152.8	237	2,393	9.9	938	1,427
April.....	151.9	240	2,420	9.9	956	1,440
May.....	148.0	234	2,410	9.7	970	1,438
June.....	144.2	233	2,430	9.6	969	1,442
July.....	141.1	226	2,368	9.5	966	1,431
August....	160.1	235	2,391	9.8	977	1,446
September.	170.4	233	2,414	9.5	983	1,446
October....	191.5	247	2,372	10.4	973	1,411
November ..	204.4	268	2,395	11.2	971	1,391
December..	186.1	250	2,387	10.5	938	1,411
1938						
January....	179.3	251	2,360	10.6	910	1,434
February ..	167.5	236	2,361	10.0	921	1,440
March.....	173.8	242	2,379	10.2	933	1,438
April.....	172.0	243	2,445	9.9	970	1,456
May.....	171.2	241	2,438	9.9	965	1,449
June.....	166.9	242	2,484	9.7	990	1,462
July.....	168.9	235	2,445	9.6	991	1,436
August....	173.7	257	2,460	10.4	984	1,440
September.	203.7	264	2,492	10.6	1,025	1,421
October....	214.7	286	2,518	11.4	1,051	1,409
November ..	195.9	271	2,506	10.8	1,034	1,426
December..	185.5	257	2,498	10.3	1,005	1,463
1939						
January....	180.7	269	2,501	10.8	982	1,454
February ..	162.3	261	2,514	10.4	1,000	1,490
March.....	159.8	253	2,538	10.0	999	1,499
April.....	165.2	255	2,551	10.0	1,010	1,509

TABLE II

CASH RATIOS OF NINE* AUSTRALIAN TRADING BANKS, 1926-36†

Quarter ending	Cash in Australia‡ to total deposits	Per cent
1926—March.....		20.21
June.....		18.95
September.....		19.65
December.....		19.28
1927—March.....		19.94
June.....		18.41
September.....		19.21
December.....		19.86
1928—March.....		20.16
June.....		18.90
September.....		18.50
December.....		19.22
1929—March.....		19.22
June.....		16.52
September.....		15.71
December.....		15.44
1930—March.....		15.52
June.....		13.99
September.....		13.64
December.....		15.14
1931—March.....		18.68
June.....		20.44
September.....		17.67
December.....		15.96

*Excluding the Commonwealth Bank; and also the (very small operations of the) Bank of New Zealand.

†Quarterly averages of weekly figures taken from the *Report of the Royal Commission on Monetary and Banking Systems, 1937*, pp. 300-1.

‡Including coin, bullion, Australian notes, and deposits with the Commonwealth Bank.

TABLE II—*Continued*

Quarter ending	Cash in Australia‡ to total deposits
	Per cent
1932—March.....	18.81
June.....	17.94
September.....	15.24
December.....	15.13
1933—March.....	15.79
June.....	14.96
September.....	14.94
December.....	15.34
1934—March.....	16.40
June.....	17.90
September.....	17.79
December.....	16.09
1935—March.....	14.26
June.....	13.22
September.....	12.17
December.....	11.63
1936—March.....	11.46
June.....	10.61
September.....	10.57
December.....	10.73

TABLE III

RESERVE BANK OF NEW ZEALAND, 1934-9*
£NZ 000,000

	Reserves†	Advan-ces‡	Invest-ments	Reserve Bank notes	Govern-ment deposits	Trading banks' deposits
Last Monday in						
1934—August.....	27.69	....	1.50	7.98	3.30	16.51
September.....	28.85	....	1.50	8.66	4.41	15.91
October.....	26.42	....	1.54	8.88	5.02	12.68
November.....	26.61	....	1.56	9.61	6.39	10.74
December.....	25.09	....	1.87	9.77	6.69	9.07
1935—January.....						
February.....	24.87	....	1.97	9.53	8.29	7.69
March.....	24.81	....	2.04	9.33	10.25	5.95
April.....	25.43	....	2.10	9.34	12.03	4.80
May.....	24.89	....	2.10	9.43	12.34	3.83
June.....	25.59	....	2.10	9.30	12.77	4.21
July.....	25.61	....	2.10	9.11	13.29	3.92
August.....	23.85	....	2.10	8.85	11.29	4.26
September.....	23.61	....	2.10	8.77	10.98	4.47
October.....	22.49	....	2.13	8.89	9.20	4.64
November.....	19.63	....	1.53	8.95	5.69	4.50
December.....	20.26	....	1.54	9.12	5.71	5.26
1936—January.....						
February.....	24.20	....	1.64	10.72	3.70	9.68
March.....	24.90	....	1.77	10.06	4.51	10.25
April.....	25.91	....	1.78	9.85	5.68	10.67
May.....	27.63	....	1.83	10.15	8.79	8.99
June.....	27.02	....	1.82	10.24	8.58	8.58
July.....	26.54	....	2.00	10.16	8.98	8.08
August.....	24.92	....	2.04	10.04	8.84	6.70
July.....	24.93	....	2.04	10.18	9.13	6.37
August.....	22.60	0.07	2.04	11.15	6.44	5.70

*All figures taken from various issues of the Reserve Bank's *Statistical Summary*.

†Since April, 1935, the gold holdings of the Bank have stayed constant at £NZ 2.80 millions; and before that they stayed fairly steady at slightly larger figures. All the important movements in reserves have been due to foreign exchange.

‡The Reserve Bank's advances have been almost entirely to the State, and very largely to the Marketing Department until the middle of 1938. By the end of that year, however, other advances to the State had risen to about £NZ 12 millions.

TABLE III—*Continued*

	Reserve†	Advances‡	Investments	Reserve Bank notes	Govern-ment deposits	Trading banks' deposits
Last Monday in 1936—September....	19.64	1.80	2.12	11.17	3.90	6.87
October.....	19.35	3.45	2.19	11.48	4.08	7.69
November....	19.38	5.09	2.35	11.84	3.88	9.56
December....	19.33	7.86	2.70	13.64	3.54	11.06
1937—January.....	20.70	7.91	3.16	13.07	5.04	11.89
February.....	21.60	8.37	2.45	12.75	6.35	11.74
March.....	21.90	7.13	2.45	13.18	7.89	8.88
April.....	23.11	6.75	2.91	12.96	7.71	9.79
May.....	25.13	4.87	2.91	12.97	7.38	10.13
June.....	24.34	4.94	2.91	12.63	7.36	9.82
July.....	23.66	4.58	2.91	12.59	6.42	9.76
August.....	23.36	4.79	2.91	12.79	6.27	9.91
September....	21.87	4.57	2.91	12.99	5.15	8.87
October....	20.40	3.27	2.66	13.27	4.86	7.39
November....	19.39	5.29	2.66	13.32	5.19	6.73
December....	19.79	7.08	2.66	15.23	3.49	8.93
1938—January.....	19.03	7.72	2.92	14.24	3.53	9.81
February.....	20.05	7.27	2.97	13.77	7.09	8.17
March.....	19.73	5.13	2.97	13.55	7.12	5.59
April.....	21.13	4.07	2.42	14.08	5.00	6.55
May.....	21.08	3.78	2.74	13.82	4.67	7.34
June.....	19.41	4.76	2.73	13.78	4.65	6.86
July.....	17.91	6.07	2.73	13.56	3.71	7.78
August.....	16.50	6.63	2.73	13.70	3.99	6.49
September....	14.25	7.66	2.73	13.74	3.91	5.39
October....	10.51	10.93	2.73	14.44	3.15	4.81
November....	7.63	13.52	3.51	14.59	3.00	5.14
December....	7.48	16.46	3.61	16.64	2.84	7.19
1939—January.....	6.94	17.26	3.63	15.37	2.62	8.59
February.....	7.64	19.67	3.65	14.91	4.02	10.47
March.....	7.46	19.43	3.66	15.33	3.82	9.04
April.....	7.46	19.68	3.77	15.66	3.10	10.31
May.....	7.37	19.52	3.77	15.57	2.55	9.43
June.....	8.40	16.93	3.77	15.47	2.33	9.64
July.....	8.38	18.94	3.75	15.69	2.86	10.76

TABLE IV
AUSTRALIAN TREASURY BILLS:^a CHRONOLOGY, 1929-39

End of quarter	Total outstanding £A 000,000	Held by Commonwealth Bank £A 000,000	Held by nine trading banks £A 000,000	Rate Per cent	
1929 December.....	2.5	1.0	1.2	5½%	October—Treasury bills issued instead of public loan. Previously all bills had been met at maturity. (See Report of the Royal Commission on Monetary and Banking Systems in Australia, 1937, para. 126 and 138.)
1930 March.....	2.3	....	2.0	6%	(Oct.)
June.....	2.3	....	2.2		
September.....	2.6	....	2.6		
December.....	9.0	2.5	6.4		
1931 March.....	19.9	12.7	6.9	4%	(July)
June.....	20.6	13.4	7.2		
September.....	31.2	14.8	16.0		
December.....	39.8	13.7	24.6		
1932 March.....	43.4	14.0	29.4		
June.....	45.0	13.9	30.9		
					July—Commonwealth Bank expresses view that funding should be begun. (See Report, par. 148.)

^aStatistics for the years 1929-36 taken from the *Report of the Royal Commission on Monetary and Banking Systems in Australia*, 1937, p. 379. Those for the years 1937-9 supplied by the Economic Department of the Bank of New South Wales.

†Excluding the holdings of the Bank of New Zealand 1929-36. This omission is the chief reason why each figure in the first column is smaller than the sum of the figures in the next columns.

TABLE IV—Continued

End of quarter	Total outstanding £A 000,000	Held by Commonwealth Bank £A 000,000	Held by nine trading banks £A 000,000	Rate Per cent	
1932 (<i>Cont'd.</i>)					
September.....	51.2	12.7	38.1	31% (Nov.)	October—Commonwealth Bank's offer to float loan to fund £A 12m. is rejected by Loan Council; but £A 4m. undertaken. (See <i>Report</i> , par. 148.)
December.....	50.8	14.7	35.8		
1933					
March.....	51.8	16.8	34.9	31% (Jan.)	February—By arrangement between Commonwealth Bank and Loan Council bills no longer used for public work. (See <i>Report</i> , par. 133.)
June.....	48.9	20.2	28.1	21% (Feb.)	
September.....	50.7	21.5	28.7	21% (June)	
December.....	50.8	20.8	29.5		November—£A 5m. funded. (See <i>Report</i> , par. 148.)
1934					
March.....	51.3	21.1	29.6	21% (April)	
June.....	48.5	21.1	27.1		June—Board of Commonwealth Bank announces that only normal revenue lag can be financed through bills.
September.....	51.0	24.9	25.8		Discount guarantee withdrawn. (See <i>Report</i> , par. 133.)
December.....	51.1	28.0	22.7		October—Loan Council rejects further £A 5m. funding proposal. (See <i>Report</i> , par. 148.)
1935					
March.....	48.9	24.4	24.2		
June.....	45.1	21.5	23.1		
September.....	47.8	23.5	24.0		
December.....	51.1	26.9	23.8		

TABLE IV—*Continued*

End of quarter	Total outstanding £A 000,000	Held by Commonwealth Bank £A 000,000	Held by nine trading banks £A 000,000	Rate Per cent
1936				1½% since 1934
March	48.8	23.2	24.9	
June	47.0	23.5	23.2	
September	48.8	25.0	23.5	
December	53.6	31.2	21.9	
1897§				
March	52.7	26.7	26.0†	
June	47.3	22.2	25.1†	
September	47.5	24.9	22.5†	
December	52.6	31.7	20.9†	
1938§				
March	53.8	33.7	20.1†	
June	50.2	30.8†	19.4	
September	48.1	31.1	17.0†	
December	55.3	36.6	18.7†	
1939§				
March	57.9	32.5	25.4†	
June	54.6	29.5	25.0†	

† Including holdings of the Bank of New Zealand.

‡ Ten trading banks' holdings.

§ Figures for 1937-9 are averages of weekly figures for the quarters ending in the respective months.

TABLE V

AUSTRALIAN TRADING BANKS, 1928-39*
£A 000,000

Average of weekly figures for quarter ending	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Cash and deposits with the Commonwealth Bank	Australian treasury bills	London funds excluding Australian securities†	Liquid assets (1)+(2)+(3)	Total advances, discounts, etc.	Govern-ment securities	Total deposits	Proportion of liquid assets to total deposits (4) ÷ (7)
1928—March.....	55.8	....	35.8	91.6	224.5	23.3	276.0	33.2
June.....	52.0	....	41.3	93.3	223.1	22.9	274.2	34.0
September.....	49.6	....	29.2	78.8	229.4	22.8	287.6	29.4
December.....	53.2	....	27.5	80.7	238.0	22.7	275.9	29.2
1929—March.....	55.4	....	34.8	90.2	240.6	23.1	287.8	31.3
June.....	47.2	....	32.6	79.8	248.2	23.3	285.2	28.0
September.....	43.8	....	17.6	61.4	260.8	21.3	277.9	22.1
December.....	42.8	0.4	9.3	52.5	271.4	20.4	276.0	19.0

*All figures except those in columns 3, 4, and 8 have been compiled by the Economic Department of the Bank of New South Wales from the official weekly returns published in the Sydney *Morning Herald*. These figures relate to the ten trading banks, including the Bank of New Zealand and excluding the Commonwealth Bank.

†The figures for London funds are taken from the *Report of the Royal Commission on Monetary and Banking Systems, 1937*. These exclude the Bank of New Zealand. The only figures available after 1936 are the annual ones for all banks including the Commonwealth Bank. These refer to June 30 and are released six months later. They were: 1937—£ stg. 71.8 and 1938—£ stg. 62.7.

‡Excluding Bank of New Zealand.

TABLE V—Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Average of weekly figures for quarter ending	Australian treasury bills	London funds excluding Australian securities†	Liquid assets (1)+(2)+ (3)	Total advances, discounts, etc.	Govern- ment securities	Total deposits	Proportion of liquid assets to total deposits (4) ÷ (7)
1930—March.....	42.5	0.2	15.7	58.4	266.8	20.9	273.2 21.4
June.....	37.6	0.5	21.2	59.3	262.8	18.8	267.0 22.2
September.....	35.8	0.8	19.2	55.8	257.6	18.4	261.0 21.4
December.....	40.0	3.6	15.7	59.3	256.0	18.5	261.9 22.6
1931—March.....	48.9	5.1	21.6	75.6	247.2	16.8	261.7 28.9
June.....	53.1	5.4	20.7	79.2	241.3	16.1	258.3 30.7
September.....	45.3	13.3	19.8	78.4	240.7	14.6	255.8 30.6
December.....	42.9	18.1	31.4	92.4	236.2	15.7	263.5 34.4
1932—March.....	53.2	24.6	28.8	106.6	228.4	15.4	282.3 37.8
June.....	49.8	27.4	24.0	101.2	229.3	16.3	277.1 36.5
September.....	40.9	29.7	19.1	89.7	231.4	18.4	268.0 33.5
December.....	41.6	38.2	23.6	103.4	233.6	14.2	274.6 37.7
1933—March.....	43.9	35.7	27.2	106.8	232.4	17.0	277.7 38.5
June.....	41.3	33.5	25.4	100.2	234.1	19.3	274.7 36.5
September.....	40.2	29.7	20.1	80.0	237.1	21.2	268.7 33.5
December.....	42.7	27.8	26.6	97.1	239.3	21.8	278.7 34.8
1934—March.....	47.8	30.0	34.9	112.7	235.2	22.0	291.3 38.7
June.....	53.3	29.6	30.2	113.1	237.0	22.5	297.0 38.1
September.....	51.7	25.8	23.1	100.6	242.3	24.9	290.1 34.7

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TABLE V—Continued

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Average of weekly figures for quarter ending	Cash and deposits with the Common- wealth Bank	Australian treasury bills	London funds excluding Australian securities†	Liquid assets (1) + (2) + (3)	Total advances, discounts etc.	Govern- ment securities	Total deposits	Proportion of liquid assets to total deposits (4) ÷ (7)
1935—March.....	41.8	24.4	25.4	91.6	249.4	29.0	293.0	31.3
June.....	38.5	24.2	22.4	85.1	253.7	27.8	291.7	29.2
September.....	34.5	22.6	18.0	75.1	258.0	27.0	284.0	26.4
December.....	33.6	24.5	21.8	79.9	260.8	23.5	289.6	27.6
1936—March.....	33.6	25.1	30.2	88.9	258.6	20.7	293.4	30.3
June.....	30.9	24.9	28.4	85.2	262.4	19.4	291.5	29.2
September.....	30.0	23.7	21.6	75.3	286.5	19.4	284.3	26.5
December.....	31.2	23.2	28.6	81.0	287.6	18.2	291.3	27.8
1937—March.....	37.6	26.0	†	...	261.5	17.9	307.2	...
June.....	38.4	25.1	...	...	261.6	19.6	313.2	...
September.....	37.0	22.5	...	...	265.8	22.8	308.3	...
December.....	38.5	20.9	...	...	274.3	23.8	314.1	...
1938—March.....	39.7	20.1	...	...	278.2	25.2	321.3	...
June.....	33.6	19.4†	...	...	285.7	24.4	320.5	...
September.....	32.8	17.0†	...	...	288.6	21.9	312.0	...
December.....	35.1	18.7†	...	...	291.1	20.6	317.9	...
1939—March.....	36.2	25.4†	...	...	286.3	21.2	322.7	...
June.....	30.5	25.0	...	...	292.1	22.9	322.3	...

TABLE VI

COMMERCIAL BANKS IN SOUTH AFRICA, 1928-38
£SA 000,000

End of quarter	Cash reserve in Union*	Liquid assets outside Union†	Securities in Union‡	Advances and discounts in Union§	Deposits in Union||
1928—March.....	8.3	21.5	2.4	41.6	60.0
June.....	8.5	23.5	3.0	43.7	61.1
September...	8.4	21.7	5.1	45.7	61.2
December...	8.8	20.7	5.2	45.3	62.8
1929—March.....	8.4	24.3	3.1	45.6	61.3
June.....	8.3	21.1	2.8	50.0	61.1
September...	8.7	19.6	4.2	50.8	61.1
December...	8.7	17.4	4.1	51.1	61.1
1930—March.....	8.2	20.6	3.7	47.3	58.6
June.....	8.0	25.5	4.1	46.8	60.8
September...	8.0	27.6	4.9	46.4	62.5
December...	8.1	30.2	5.8	44.6	63.8
1931—March.....	7.7	32.1	5.0	43.3	63.2
June.....	7.3	32.7	7.5	43.2	62.8
September...	7.2	27.3†	7.2	45.6	61.4
December...	6.9	18.8†	5.9	43.5	56.6
1932—March.....	6.7	21.3†	4.2	40.8	52.6
June.....	7.1	22.8†	8.1	38.8	54.7
September...	6.3	22.9†	8.4	37.9	53.4
December...	6.9	35.1†	8.2	38.6	54.6

*Coin, bullion, notes, and deposits with the Reserve Bank. Figures taken from official monthly returns for last day of each month published in the *Official Year Book*.

†Securities and call and short loans. Figures for last day of each quarter taken from official quarterly returns published in the *Monthly Review of the Standard Bank of South Africa*. Figures for December, 1931, to December, 1932, inclusive (but not for September 30, 1931) converted into Union currency at the prevailing exchange rate.

‡From quarterly returns.

§From monthly returns.

||Fixed, saving, and current deposits. From monthly returns.

TABLE VI—*Continued*

	Cash reserve in Union*	Liquid assets outside Union†	Securities in Union‡	Advances and discounts in Union§	Deposits in Union||
1933—March.....	22.2	41.0	5.0	34.7	67.9
June.....	28.8	39.0	6.1	33.8	74.1
September...	25.6	40.9	5.4	36.2	76.7
December...	29.3	38.6	7.6	35.2	81.2
1934—March.....	30.0	40.5	6.2	35.7	80.4
June.....	31.5	45.6	7.2	37.8	87.4
September...	22.7	41.6	7.8	43.2	82.1
December...	25.1	37.9	8.6	45.6	85.0
1935—March.....	28.3	36.6	5.7	44.8	82.6
June.....	30.0	40.5	5.5	45.2	85.6
September...	29.5	36.2	5.7	46.6	84.8
December...	31.4	36.4	5.7	46.1	88.5
1936—March.....	30.1	37.7	5.5	46.5	85.3
June.....	25.8	38.1	11.0	47.6	86.5
September...	20.9	38.9	13.7	50.6	87.2
December...	25.7	38.3	13.6	52.9	95.1
1937—March.....	26.3	39.9	10.6	54.2	93.7
June.....	21.2	40.4	12.6	55.5	92.0
September...	21.0	38.6	10.6	58.8	91.9
December...	20.5	39.0	12.7	58.8	93.9
1938**—					
March.....	21.0	39.3	10.3	57.2	91.4
June.....	20.9	44.2	14.3	56.4	94.0
September...	26.2	43.6	13.9	54.3	94.4
December...	28.5	41.7	15.8	52.3	99.0

**All figures for 1938 taken from quarterly returns.

TABLE VII

SOUTH AFRICAN RESERVE BANK, 1928-38
£SA 000,000

End of quarter†	Notes in circulation	Bankers' deposits	Government deposits	Other deposits	Gold coin and bullion	Domestic bills	Foreign bills	Union treasury bills	Loans to Government	Other loans	Other assets‡
1928—March 31.....	8,953	5,587	3,576	0,105	8,419	0,798	8,093	0,040	...	0,139	2,375
June 29.....	8,989	5,311	1,734	0,290	8,274	0,084	8,288	0,092	...	0,113	1,328
September 28.....	9,011	5,282	1,190	0,210	8,089	0,546	7,657	0,191	...	0,212	0,987
December 28.....	9,487	5,001	2,897	0,250	8,070	1,690	8,326	0,447	...	0,179	0,826
1929—March 31.....	9,605	5,462	2,745	0,244	8,955	1,036	8,128	0,244	...	0,190	1,486
June 28.....	9,636	4,787	1,635	0,287	7,747	1,060	7,524	0,151	...	0,201	1,479
September 27.....	9,131	4,625	2,160	0,291	7,941	1,758	7,185	0,237	...	0,238	0,744
December 27.....	9,173	4,755	1,839	0,626	7,495	1,366	6,567	1,801	...	0,314	1,110
1930—March 31.....	8,981	5,040	2,275	0,281	7,306	1,279	6,500	1,111	...	0,278	1,578
June 27.....	8,550	4,662	1,496	0,139	6,923	0,295	7,505	0,224	...	0,242	1,191
September 26.....	7,743	4,444	2,065	0,131	6,694	0,040	7,250	0,150	0,200	0,272	0,932
December 31.....	8,839	4,974	1,654	0,128	6,859	1,084	7,152	0,372	...	0,486	1,468

*From official returns.

†Last Friday in the month; except in the case of March, where the last day of the month is given because it is the date of the annual balance sheet. Figures are also given for the last day in December wherever the last Friday fell on Christmas or Boxing Day.

This item becomes important from January, 1933, owing to the inclusion of a Gold Premium Account (see *Annual Reports* from 1934 onwards).

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TABLE VII—Continued

End of quarter†	Notes in circulation	Bankers' deposits	Govern-ment deposits	Other deposits	Gold coin and bullion	Domestic bills	Foreign bills	Union treasury bills	Loans to Govern-ment	Other loans	Other assets‡
1931—March 31.....	8,367	5,061	3,036	0,085	7,132	0,300	7,751	0,260	....	0,186	1,620
June 26.....	7,383	4,879	2,752	0,266	6,303	0,609	6,814	0,221	....	0,371	1,412
September 25.....	6,852	4,809	1,694	0,299	6,541	0,024	6,241	0,109	....	0,278	1,097
December 31.....	8,799	4,267	1,277	0,533	8,104	2,885	0,041	0,803	1,500	0,726	2,862
1932—March 31.....	8,422	4,000	1,449	0,310	6,521	2,758	0,063	1,649	2,650	....	1,552
June 24.....	6,541	4,314	1,432	0,314	7,861	0,796	0,015	0,001	3,200	0,048	0,633
September 30.....	7,933	3,997	1,171	0,142	6,512	1,861	0,000	....	3,650	0,002	0,757
December 30.....	8,355	3,833	1,175	0,141	7,173	1,203	0,000	0,202	3,450	0,344	1,071
1933—March 31.....	9,847	19,690	1,368	1,259	10,998	0,813	14,437	0,002	2,250	0,012	3,343
June 30.....	10,753	26,163	1,171	3,766	14,298	0,008	21,145	0,009	2,000	0,010	4,013
September 29.....	10,775	23,544	1,851	1,120	14,830	0,069	18,935	....	....	0,146	3,704
December 29.....	11,859	26,991	0,942	3,164	17,144	0,008	18,886	....	2,400	0,297	4,880
1934—March 31.....	11,997	27,828	3,457	2,175	17,740	0,006	22,424	....	....	0,180	5,732
June 26.....	12,863	28,895	2,398	5,848	19,596	0,013	20,996	....	....	0,100	9,230
September 28.....	12,507	20,763	1,680	2,600	18,774	0,163	10,781	....	1,200	....	7,315
December 28.....	13,007	21,471	1,882	5,216	22,287	0,051	10,517	....	....	0,018	9,715

CENTRAL BANKING IN THE DOMINIONS

TABLE VII—Continued

End of quarter†	Notes in circulation	Bankers' deposits	Govern-ment deposits	Other deposits	Gold coin and bullion	Domestic bills	Foreign bills	Union treasury bills	Loans to Govern-ment	Other loans	Other assets‡
1935—March 31.....	13.156	25.734	7.903	2.598	28.263	0.217	6.531	...	...	...	15.651
June 28.....	13.428	27.171	1.517	4.370	26.672	0.117	5.688	...	...	...	14.809
September 27.....	13.350	27.077	2.481	2.425	25.748	0.023	6.796	...	...	...	13.694
December 27.....	14.133	28.435	2.436	4.474	25.723	0.321	11.871	...	...	...	13.225
1936—March 31.....	14.627	27.089	5.657	2.563	29.398	0.156	5.203	...	...	...	16.762
June 26.....	14.244	24.103	2.364	2.804	22.916	0.025	9.771	...	...	...	11.911
September 25.....	14.087	17.994	3.389	2.389	22.930	0.016	5.116	...	...	...	10.990
December 31.....	16.416	22.451	1.686	3.917	24.635	0.031	10.794	...	0.800	...	11.916
1937—March 31.....	16.398	22.881	4.830	3.540	28.346	0.021	5.591	...	...	...	15.526
June 25.....	15.416	18.526	2.168	5.295	24.409	0.038	6.285	...	0.100	...	11.588
September 24.....	15.241	18.373	2.499	3.083	22.938	0.020	6.385	...	0.600	0.002	10.552
December 31.....	18.093	16.933	1.478	5.063	22.937	0.281	6.875	...	3.400	0.137	10.964
1938—March 31.....	17.396	17.572	1.577	2.720	23.513	0.373	5.852	...	0.900	...	11.542
June 24.....	15.930	17.796	2.729	4.334	22.724	0.023	8.253	...	...	...	11.101
September 30.....	18.437	23.221	2.082	3.209	26.709	0.022	6.977	...	0.800	...	14.105

TABLE VIII

PRICES OF STERLING AND AMERICAN FUNDS IN TERMS OF CANADIAN DOLLARS
1928-39*

	Price of sterling A	Price of U.S. dollar B	Price of one pound plus eight U.S. dollars A+8B
1928—January.....	4.88	1.002	12.90
February.....	4.88	1.002	12.90
March.....	4.88	1.000	12.88
April.....	4.87	1.000	12.87
May.....	4.88	1.001	12.89
June.....	4.89	1.002	12.91
July.....	4.87	1.002	12.89
August.....	4.85	0.994	12.80
September.....	4.84	1.000	12.84
October.....	4.85	1.000	12.85
November.....	4.84	0.998	12.82
December.....	4.86	1.003	12.88
1929—January.....	4.86	1.003	12.88
February.....	4.87	1.004	12.90
March.....	4.88	1.006	12.93
April.....	4.89	1.008	12.95
May.....	4.88	1.007	12.94
June.....	4.88	1.008	12.94
July.....	4.87	1.005	12.91
August.....	4.87	1.006	12.92
September.....	4.88	1.008	12.94
October.....	4.92	1.014	13.03
November.....	4.95	1.016	13.08
December.....	4.92	1.008	12.98
1930—January.....	4.92	1.013	13.02
February.....	4.89	1.006	12.95
March.....	4.87	1.002	12.89
April.....	4.86	1.000	12.86
May.....	4.87	1.002	12.89
June.....	4.86	1.000	12.86
July.....	4.85	0.999	12.84
August.....	4.86	0.999	12.85
September.....	4.85	0.998	12.83
October.....	4.85	0.999	12.84
November.....	4.85	0.999	12.84
December.....	4.86	1.002	12.88

*Dominion Bureau of Statistics figures: Monthly averages of daily quotations.

TABLE VIII—*Continued*

	Price of sterling A	Price of U.S. dollar B	Price of one pound plus eight U.S. dollars A+8B
1931—January.....	4.86	1.002	12.88
February.....	4.86	1.000	12.86
March.....	4.85	1.000	12.85
April.....	4.86	1.000	12.86
May.....	4.86	1.001	12.87
June.....	4.88	1.003	12.90
July.....	4.87	1.003	12.89
August.....	4.87	1.003	12.89
September.....	4.69	1.043	13.03
October.....	4.38	1.124	13.38
November.....	4.19	1.123	13.17
December.....	4.09	1.210	13.77
1932—January.....	4.01	1.171	13.38
February.....	3.96	1.143	13.10
March.....	4.06	1.114	12.97
April.....	4.16	1.112	13.06
May.....	4.17	1.133	13.23
June.....	4.20	1.153	13.42
July.....	4.07	1.147	13.25
August.....	3.95	1.139	13.06
September.....	3.84	1.105	12.68
October.....	3.71	1.095	12.47
November.....	3.79	1.157	13.05
December.....	3.79	1.156	13.04
1933—January.....	3.85	1.143	13.09
February.....	4.10	1.197	13.68
March.....	4.14	1.199	13.73
April.....	4.23	1.179	13.66
May.....	4.50	1.141	13.63
June.....	4.62	1.112	13.52
July.....	4.93	1.058	13.39
August.....	4.79	1.061	13.28
September.....	4.84	1.036	13.14
October.....	4.79	1.024	12.98
November.....	5.08	0.990	13.00
December.....	5.10	0.995	13.06

TABLE VIII—*Continued*

	Price of sterling A	Price of U.S. dollar B	Price of one pound plus eight U.S. dollars A+8B
1934—January.....	5.07	1.005	13.11
February.....	5.08	1.008	13.10
March.....	5.11	1.002	13.13
April.....	5.15	0.998	13.18
May.....	5.10	0.998	13.08
June.....	5.01	0.992	12.95
July.....	4.99	0.988	12.89
August.....	4.95	0.977	12.81
September.....	4.86	0.971	12.63
October.....	4.84	0.979	12.67
November.....	4.87	0.976	12.68
December.....	4.89	0.988	12.79
1935—January.....	4.89	0.999	12.88
February.....	4.88	1.001	12.89
March.....	4.83	1.010	12.91
April.....	4.86	1.005	12.90
May.....	4.90	1.002	12.92
June.....	4.94	1.001	12.95
July.....	4.97	1.002	12.99
August.....	4.99	1.003	13.01
September.....	4.97	1.008	13.03
October.....	4.98	1.014	13.09
November.....	4.98	1.011	13.07
December.....	4.98	1.009	13.05
1936—January.....	4.97	1.001	12.98
February.....	4.99	0.999	12.98
March.....	4.98	1.001	12.99
April.....	4.97	1.005	13.01
May.....	4.98	1.002	13.00
June.....	5.03	1.003	13.05
July.....	5.03	1.001	13.04
August.....	5.03	1.000	13.03
September.....	5.04	1.000	13.04
October.....	4.90	1.000	12.90
November.....	4.88	0.999	12.87
December.....	4.90	0.999	12.89

TABLE VIII—*Continued*

	Price of sterling A	Price of U.S. dollar B	Price of one pound plus eight U.S. dollars A+8B
1937—January.....	4.91	1.000	12.91
February.....	4.90	1.000	12.90
March.....	4.88	1.000	12.88
April.....	4.91	0.999	12.90
May.....	4.93	0.998	12.91
June.....	4.94	1.001	12.95
July.....	4.97	1.001	12.98
August.....	4.98	1.000	12.98
September.....	4.95	1.000	12.95
October.....	4.95	1.000	12.95
November.....	4.99	0.999	12.98
December.....	5.00	1.000	13.00
1938—January.....	5.00	1.000	13.00
February.....	5.02	1.000	13.02
March.....	5.00	1.003	13.02
April.....	5.01	1.005	13.05
May.....	5.01	1.008	13.07
June.....	5.01	1.011	13.10
July.....	4.96	1.005	13.00
August.....	4.90	1.003	12.92
September.....	4.83	1.006	12.87
October.....	4.81	1.009	12.88
November.....	4.74	1.007	12.80
December.....	4.71	1.009	12.79
1939—January.....	4.71	1.008	12.77
February.....	4.71	1.005	12.75
March.....	4.70	1.004	12.73
April.....	4.70	1.005	12.74

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